



Daikin Altherma mid
temperature split
Technical Data
ERRA08-12EW1



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ERRA08-12EW1

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1 Features

1 - 1 ERRA08-12EW1

- › Outdoor unit extracts heat from the outdoor air, even at -25°C
- › By heat pump operation only, the outdoor unit delivers a leaving water temperature of 65°C at -15°C ambient temperature
- › By -15°C ambient temperature, the outdoor unit limits heating capacity loss
- › Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A, leads directly to lower energy consumption thanks to its high energy efficiency and has a 30% lower refrigerant charge
- › WLAN cartridge included




Guaranteed operation down to -25°C



Onecta app

2 Specifications

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Technical specifications					ELBH12E6V + ERRA08EW1	ELBH12E6V + ERRA10EW1	ELBH12E6V + ERRA12EW1	
Heating capacity	Min.			kW	3.45 (1)			
	Nom.			kW	6.17 (2)			
	Max.			kW	7.95 (1)	9.25 (1)	9.97 (1)	
Power input	Heating	Min.		kW	0.70 (3)			
		Nom.		kW	1.21 (2)			
		Max.		kW	1.63 (3)	1.98 (3)	2.21 (3)	
COP					5.10 (2)			
Pump	Type				Grundfos UPM4L K 15-75 130 9 DK1			
	Nominal ESP Heating unit				67.9 (4)			
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	18.3			
General	Supplier/ Manufacturer details	Name and address			Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
		Name or trademark			Daikin Europe N.V.			
	Product description	Air-to-water heat pump				Yes		
		Brine-to-water heat pump				No		
		Heat pump combination heater				Yes		
		Low-temperature heat pump				No		
		Supplementary heater integrated				Yes		
		Water-to-water heat pump				No		
	LW(A) Sound power level (according to EN14825)	Indoor			dB(A)	44.0		
LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	56.0			
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825			
Space heating general	Air to water unit	Rated airflow (outdoor)			m ³ /h	3,542		
		Other	Capacity control				Inverter	
	Pck (Crankcase heater mode)			kW	0.000			
	Poff (Off mode)			kW	0.027			
	Psb (Standby mode)			kW	0.027			
	Pto (Thermostat off)			kW	0.024			
	Integrated supplementary heater	Psup			kW	6.0		
Type of energy input				Electrical				
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption		kWh	7,541	7,522	7,309
			ηs (Seasonal space heating efficiency)		%	134		138
		Prated at -10°C		kW	12.5			
		Qhe Annual energy consumption (GCV)		Gj	27		26	
		SCOP			3.42	3.43	3.53	
		Seasonal space heating eff. class			A++			
		A Condition (-7°CDB/-8°CWB)		Cdh (Degradation heating)			1.0	

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Technical specifications				ELBH12E6V + ERRA08EW1	ELBH12E6V + ERRA10EW1	ELBH12E6V + ERRA12EW1
Space heating Average climate water outlet 55°C	A Condition (-7°CDB/8°CWB)	COPd			2.34	
		Pdh	kW		7.6	
		PERd	%		93.6	
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0	
		COPd			3.50	
		Pdh	kW		6.8	
	C Condition (7°CDB/6°CWB)	PERd	%		140.0	
		Cdh (Degradation heating)			1.0	
		COPd			5.07	
	D Condition (12°CDB/11°CWB)	Pdh	kW		4.5	
		PERd	%		202.8	
		Cdh (Degradation heating)			1.0	
	Tol (temperature operating limit)	COPd		2.04		2.06
		Pdh	kW	6.9		8.2
		PERd	%	81.6		82.4
		TOL	°C			-10
		WTOL	°C			55
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	5.6		4.3
		Tbiv (bivalent temperature)	°C			
	Cold climate water outlet 55°C	General	COPd		2.90	
Pdh			kW	8.5		10.0
PERd			%	116.0		99.2
Tbiv			°C	-2		-5
Annual energy consumption			kWh	7,088		6,950
A Condition (-7°CDB/8°CWB)	General	ηs (Seasonal space heating efficiency)	%	122		125
		Prated at -22°C	kW			9.0
		Qhe Annual energy consumption (GCV)	Gj	26		25
		Cdh (Degradation heating)				1.0
		COPd				2.61
B Condition (2°CDB/1°CWB)	General	Pdh	kW		5.2	
		PERd	%	104.2		104.4
		Cdh (Degradation heating)				1.0
C Condition (7°CDB/6°CWB)	General	COPd			3.90	
		Pdh	kW		3.3	
		PERd	%		156.0	


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Technical specifications				ELBH12E6V + ERRA08EW1	ELBH12E6V + ERRA10EW1	ELBH12E6V + ERRA12EW1
Space heating 	Cold climate water outlet 55°C	C Condition (7°CDB/ B/6°CWB)	Cdh (Degradation heating)	1.0		
			COPd	4.96		
			Pdh kW	3.4		
			PERd %	198.3		
		D Condition (12°CDB/ B/11°CWB)	COPd	6.56		
			Pdh kW	4.2		
			PERd %	262.5		
			Tol (temperature operating limit)	COPd	1.49	1.56
			Pdh kW	4.9	6.1	7.2
			PERd %	59.6	62.3	64.7
		TOL °C	-22			
		WTOL °C	55			
	G Condition (-15°CDB/-)	COPd	2.00	2.03		
		Pdh kW	6.0	7.2		
		PERd %	80.0	81.2		
		Tbiv (bivalent tempera- ture)	COPd	2.25	2.03	
			Pdh kW	6.6	7.2	
			PERd %	90.0	81.2	
		Tbiv °C	-12	-15		
	Rated heat output supplementary capacity	Psup (at Tdesign -22°C) kW	4.1	2.9	1.8	
	Warm climate water outlet 55°C	General	Annual energy consumption kWh	2,972		
			ηs (Seasonal space heating efficiency) %	170		
			Prated at 2°C kW	9.6		
Qhe Annual energy consumption (GCV) GJ			11			
B Condition (2°CDB/ B/1°CWB)			Cdh (Degradation heating)	1.0		
		COPd	2.66			
		Pdh kW	8.0			
		PERd %	106.5			
C Condition (7°CDB/ B/6°CWB)		Cdh (Degradation heating)	1.0			
		COPd	3.79			
		Pdh kW	6.7			
		PERd %	151.5			
D Condition (12°CDB/ B/11°CWB)		Cdh (Degradation heating)	1.0			
		COPd	5.87			
		Pdh kW	3.6			
		PERd %	234.9			
Tbiv (bivalent temperature)	COPd	3.13				

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Technical specifications					ELBH12E6V + ERRA08EW1	ELBH12E6V + ERRA10EW1	ELBH12E6V + ERRA12EW1	
Space heating 	Warm climate water outlet 55°C	Tbiv	Pdh	kW	8.4			
		(bivalent)	PERd	%	125.4			
		tempera- ture)	Tbiv	°C	4			
	Average climate water outlet 35°C	General	Annual energy consumption		kWh	3,561		3,539
			ηs (Seasonal space heating efficiency)		%	190		191
			Prated at -10°C		kW	8.3		
			Qhe Annual energy consumption (GCV)		Gj	13		
			SCOP			4.81		4.84
			Seasonal space heating eff. class			A+++		
			A Condition (-7°CDB/8°CWB)	COPd			3.20	
	B Condition (2°CDB/11°CWB)	Pdh		kW	7.5			
		PERd		%	128.0			
		Cdh (Degradation heating)			1.0			
	C Condition (7°CDB/6°CWB)	COPd			4.93			
		Pdh		kW	4.4			
		PERd		%	197.2			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0			
		COPd			6.37			
		Pdh		kW	4.3			
	Tol (temperature operating limit)	PERd		%	254.8			
		Cdh (Degradation heating)			1.0			
		COPd			8.13			
	Tbiv (bivalent temperature)	Pdh		kW	6.6			
		PERd		%	325.2			
		TOL		°C	-10			
	Rated heat output supplementary capacity	WTOL		°C	35			
		COPd			2.90		2.86	
Pdh			kW	6.9		8.1		
Cold climate water outlet 35°C	PERd		%	116.0		114.4		
	TOL		°C	-10				
	WTOL		°C	35				
Tbiv (bivalent temperature)	COPd			3.20		2.86		
	Pdh		kW	7.5		8.1		
	PERd		%	128.0		114.4		
Rated heat output supplementary capacity	Tbiv		°C	-7		-10		
	Psup (at Tdesign -10°C)		kW	1.4		0.0		
	General	Annual energy consumption		kWh	5,394	5,239	5,224	
Cold climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)		%	162	166	167	
		Prated at -22°C		kW	9			

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Technical specifications				ELBH12E6V + ERRA08EW1	ELBH12E6V + ERRA10EW1	ELBH12E6V + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	General	Qhe Annual energy consumption (GCV)	19.4	18.9	18.8	
			A Condition (-7°CDB- B/-8°CWB)	COPd		3.48	
				Pdh	kW		5.4
		PERd		%		139.2	
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0	
			COPd			5.40	
			Pdh	kW		3.6	
		C Condition (7°CDB- B/6°CWB)	PERd	%		216.0	
			Cdh (Degradation heating)			1.0	
			COPd			6.53	
		D Condition (12°CDB- B/11°CWB)	Pdh	kW		5.3	
			PERd	%		261.2	
			Cdh (Degradation heating)			1.0	
		Tol (tem- perature operating limit)	COPd		2.11	2.14	2.16
			Pdh	kW	4.9	5.9	6.5
			PERd	%	84.3	85.6	86.4
		G Condition (-15°CDB/-)	TOL	°C		-22	
			WTOL	°C		35	
			Cdh (Degradation heating)			1.0	
		Tbiv (bivalent tempera- ture)	COPd		2.95	2.95	2.64
			Pdh	kW	6.5	6.5	7.0
			PERd	%	118.1	118.1	105.6
		Rated heat output sup- plementary capacity	Tbiv	°C	-12	-12	-15
			Psup (at Tdesign -22°C)	kW	4.1	3.1	2.6
General	Annual energy consumption		kWh		1,993		
Warm climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%		228		
		Prated at 2°C	kW		8.6		
		Qhe Annual energy consumption (GCV)	Gj		7		
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0			
	COPd			4.17			
	Pdh	kW		6.8			
Tbiv (bivalent tempera- ture)	PERd	%		166.8			
	COPd			4.89			
	Pdh	kW		6.8			
D Condition (12°CDB- B/11°CWB)	PERd	%		195.6			
	Cdh (Degradation heating)			1.0			
	COPd			7.78			
C Condition (7°CDB- B/6°CWB)	Pdh	kW		6.1			
	PERd	%		311.2			
	Cdh (Degradation heating)			1.0			

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |

Test at Ta DB/WB 7°C/6°C. According to EN 16147.

Technical specifications				ELBH12E9W + ERRA08EW1	ELBH12E9W + ERRA10EW1	ELBH12E9W + ERRA12EW1
Heating capacity	Min.	kW		3.45 (1)		
			Nom.		6.17 (2)	
			Max.	7.95 (1)	9.25 (1)	9.97 (1)
Power input	Heating	Min.	kW		0.70 (3)	
		Nom.	kW		1.21 (2)	
		Max.	kW	1.63 (3)	1.98 (3)	2.21 (3)
COP				5.10 (2)		


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Technical specifications				ELBH12E9W + ERRA08EW1	ELBH12E9W + ERRA10EW1	ELBH12E9W + ERRA12EW1	
Pump	Type	Grundfos UPM4L K 15-75 130 9 DK1					
	Nominal ESP Heating unit	kPa	67.9 (4)				
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3			
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
		Name or trademark		Daikin Europe N.V.			
	Product description	Air-to-water heat pump		Yes			
		Brine-to-water heat pump		No			
		Heat pump combination heater		Yes			
		Low-temperature heat pump		No			
		Supplementary heater integrated		Yes			
	LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	44.0			
Outdoor		dB(A)	56.0				
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825			
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542			
	Other	Capacity control		Inverter			
		Pck (Crankcase heater mode)		kW	0.000		
		Poff (Off mode)		kW	0.027		
		Psb (Standby mode)		kW	0.027		
		Pto (Thermostat off)		kW	0.024		
	Integrated supplementary heater	Psup		kW	9.0		
		Type of energy input		Electrical			
Space heating climate water outlet 55°C	General	Annual energy consumption	kWh	7,541	7,522	7,309	
		ηs (Seasonal space heating efficiency)	%	134		138	
		Prated at -10°C	kW	12.5			
		Qhe Annual energy consumption (GCV)	Gj	27		26	
		SCOP		3.42	3.43	3.53	
		Seasonal space heating eff. class		A++			
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0		


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Technical specifications				ELBH12E9W + ERRA08EW1	ELBH12E9W + ERRA10EW1	ELBH12E9W + ERRA12EW1	
Space heating 	Average climate water outlet 55°C	A Condition (-7°CDB)	COPd			2.34	
			Pdh kW			7.6	
			PERd %			93.6	
	B Condition (2°CDB)	Cdh (Degradation heating)				1.0	
			COPd			3.50	
			Pdh kW			6.8	
	B/1°CWB		PERd %			140.0	
		C Condition (7°CDB)	Cdh (Degradation heating)			1.0	
			COPd			5.07	
	B/6°CWB		Pdh kW			4.5	
			PERd %			202.8	
		D Condition (12°CDB)	Cdh (Degradation heating)			1.0	
	B/11°CWB		COPd			6.23	
			Pdh kW			5.2	
			PERd %			249.2	
	Tol (temperature operating limit)		COPd		2.04		2.06
			Pdh kW		6.9		8.2
			PERd %		81.6		82.4
			TOL °C				-10
			WTOL °C				55
Rated heat output supplementary capacity		Psup (at Tdesign -10°C) kW		5.6		4.3	
	Tbiv (bivalent temperature)		COPd		2.90		2.48
		Pdh kW		8.5		10.0	
		PERd %		116.0		99.2	
		Tbiv °C		-2		-5	
Cold climate water outlet 55°C	General		Annual energy consumption kWh	7,088	6,950	6,921	
			ηs (Seasonal space heating efficiency) %	122		125	
			Prated at -22°C kW		9.0		
		Qhe Annual energy consumption (GCV) GJ	26		25		
	A Condition (-7°CDB)		Cdh (Degradation heating)				1.0
		COPd				2.61	
		Pdh kW				5.2	
		PERd %		104.2		104.4	
B Condition (2°CDB)			Cdh (Degradation heating)				1.0
		COPd				3.90	
		Pdh kW				3.3	
		PERd %				156.0	

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Technical specifications				ELBH12E9W + ERRA08EW1	ELBH12E9W + ERRA10EW1	ELBH12E9W + ERRA12EW1
Space heating 	Cold climate water outlet 55°C	C Condition (7°CDB/ B/6°CWB)	Cdh (Degradation heating)	1.0		
			COPd	4.96		
			Pdh kW	3.4		
		PERd %	198.3			
		D Condition (12°CDB/ B/11°CWB)	COPd	6.56		
			Pdh kW	4.2		
	PERd %		262.5			
	Tol (tem- perature operating limit)	COPd	1.49	1.56	1.62	
		Pdh kW	4.9	6.1	7.2	
		PERd %	59.6	62.3	64.7	
		TOL °C	-22			
	G Condition (-15°CDB/-)	WTOL °C	55			
		COPd	2.00	2.03	2.03	
		Pdh kW	6.0	7.2	7.2	
		PERd %	80.0	81.2	81.2	
		Tbiv (bivalent tempera- ture)	COPd	2.25	2.03	2.03
			Pdh kW	6.6	7.2	7.2
	PERd %		90.0	81.2	81.2	
	Rated heat output sup- plementary capacity	Tbiv °C	-12	-15	-15	
		Psup (at Tdesign -22°C) kW	4.1	2.9	1.8	
	Warm climate water outlet 55°C	General	Annual energy consumption	2,972		
			ηs (Seasonal space heating efficiency)	170		
			Prated at 2°C	9.6		
			Qhe Annual energy consumption (GCV)	11		
B Condition (2°CDB/ B/1°CWB)			Cdh (Degradation heating)	1.0		
		COPd	2.66			
		Pdh kW	8.0			
C Condition (7°CDB/ B/6°CWB)		PERd %	106.5			
		Cdh (Degradation heating)	1.0			
		COPd	3.79			
D Condition (12°CDB/ B/11°CWB)		Pdh kW	6.7			
		PERd %	151.5			
	Cdh (Degradation heating)	1.0				
Tbiv (bivalent tempera- ture)	COPd	5.87				
	Pdh kW	3.6				
	PERd %	234.9				
				3.13		

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Technical specifications					ELBH12E9W + ERRA08EW1	ELBH12E9W + ERRA10EW1	ELBH12E9W + ERRA12EW1	
Space heating 	Warm climate water outlet 55°C	Tbiv	Pdh	kW	8.4			
		(bivalent)	PERd	%	125.4			
		tempera- ture)	Tbiv	°C	4			
	Average climate water outlet 35°C	General	Annual energy consumption		kWh	3,561		3,539
			ηs (Seasonal space heating efficiency)		%	190		191
			Prated at -10°C		kW	8.3		
			Qhe Annual energy consumption (GCV)		Gj	13		
			SCOP			4.81		4.84
			Seasonal space heating eff. class			A+++		
			A Condition (-7°CDB/8°CWB)	COPd			3.20	
		Pdh	kW		7.5			
		PERd	%		128.0			
	B Condition (2°CDB/11°CWB)	CdH (Degradation heating)			1.0			
		COPd			4.93			
		Pdh	kW		4.4			
	C Condition (7°CDB/6°CWB)	CdH (Degradation heating)			1.0			
		COPd			6.37			
		Pdh	kW		4.3			
	D Condition (12°CDB/11°CWB)	CdH (Degradation heating)			254.8			
		COPd			8.13			
		Pdh	kW		6.6			
	Tol (temperature operating limit)	PERd			325.2			
		COPd			2.90		2.86	
		Pdh	kW		6.9		8.1	
		PERd	%		116.0		114.4	
	Tbiv (bivalent temperature)	TOL			-10			
		WTOL			35			
COPd				3.20		2.86		
Pdh		kW		7.5		8.1		
Rated heat output supplementary capacity	PERd			128.0				
	Tbiv			-7				
	Psup (at Tdesign -10°C)			1.4				
				0.0				
Cold climate water outlet 35°C	General	Annual energy consumption		kWh	5,394	5,239	5,224	
		ηs (Seasonal space heating efficiency)		%	162	166	167	
		Prated at -22°C		kW	9			

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Technical specifications				ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	General	Qhe Annual energy consumption (GCV)	19.4	18.9	18.8	
		A Condition (-7°CDB)	COPd		3.48		
			Pdh	kW		5.4	
			PERd	%		139.2	
		B Condition (2°CDB)	Cdh (Degradation heating)		1.0		
			COPd		5.40		
			Pdh	kW		3.6	
			PERd	%		216.0	
		C Condition (7°CDB)	Cdh (Degradation heating)		1.0		
			COPd		6.53		
			Pdh	kW		5.3	
			PERd	%		261.2	
		D Condition (12°CDB)	Cdh (Degradation heating)		1.0		
			COPd		7.98		
			Pdh	kW		6.6	
			PERd	%	319.0	319.2	
		Tol (temperature operating limit)	COPd		2.11	2.14	2.16
			Pdh	kW	4.9	5.9	6.5
			PERd	%	84.3	85.6	86.4
			TOL	°C		-22	
			WTOL	°C		35	
		G Condition (-15°CDB)	COPd		2.68		2.64
			Pdh	kW	6.0		7.0
	PERd	%	107.1		105.6		
Tbiv (bivalent temperature)	COPd		2.95		2.64		
	Pdh	kW	6.5		7.0		
	PERd	%	118.1		105.6		
	Tbiv	°C	-12		-15		
Rated heat output supplementary capacity	Psup (at Tdesign -22°C)	kW	4.1	3.1	2.6		
Warm climate water outlet 35°C	General	Annual energy consumption	kWh		1,993		
		ηs (Seasonal space heating efficiency)	%		228		
		Prated at 2°C	kW		8.6		
		Qhe Annual energy consumption (GCV)	Gj		7		
	B Condition (2°CDB)	Cdh (Degradation heating)		1.0			
		COPd		4.17			
		Pdh	kW		6.8		
		PERd	%		166.8		
	C Condition (7°CDB)	Cdh (Degradation heating)		1.0			
		COPd		5.85			
Space heating 	Warm climate water outlet 35°C	B/6°CWB	Pdh	kW	5.5		
			PERd	%	234.0		
			Tbiv	°C	5		
		Tbiv (bivalent temperature)	COPd		4.89		
			Pdh	kW	6.8		
			PERd	%	195.6		
		D Condition (12°CDB)	Cdh (Degradation heating)		1.0		
			COPd		7.78		
			Pdh	kW		6.1	
			PERd	%		311.2	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |


Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |

Test at Ta DB/WB 7°C/6°C. According to EN 16147.

Technical specifications				ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1
Heating capacity	Min.		kW		3.45 (1)	
	Nom.		kW		6.17 (2)	
	Max.		kW	7.95 (1)	9.25 (1)	9.97 (1)
Cooling capacity	Nom.		kW	6.81 (3) / 6.47 (4)	7.97 (3) / 6.47 (4)	8.62 (3) / 6.47 (4)
Power input	Heating	Min.	kW		0.70 (5)	
		Nom.	kW		1.21 (2)	
		Max.	kW	1.63 (5)	1.98 (5)	2.21 (5)
	Cooling	Nom.	kW	2.08 (3) / 1.13 (4)	2.57 (3) / 1.13 (4)	2.86 (3) / 1.13 (4)
		COP			5.10 (2)	

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Technical specifications					ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1
EER					3.28 (3) / 5.75 (4)	3.10 (4) / 5.75	3.01 (3) / 5.75 (4)
Pump	Type				Grundfos UPM4L K 15-75 130 9 DK1		
	Nominal ESP Heating unit	kPa			67.9 (6)		
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	18.3		
General	Supplier/Manufacturer details	Name and address			Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium		
		Name or trademark			Daikin Europe N.V.		
	Product description	Air-to-water heat pump			Yes		
		Brine-to-water heat pump			No		
		Heat pump combination heater			Yes		
		Low-temperature heat pump			No		
		Supplementary heater integrated			Yes		
		Water-to-water heat pump			No		
	LW(A) Sound power level (according to EN14825)	Indoor	dB(A)			44.0	
LW(A) Sound power level (according to EN14825)	Outdoor	dB(A)			56.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825		
Space heating general	Air to water unit	Rated airflow (outdoor)			m ³ /h		
					3,542		
	Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)			kW		
		Poff (Off mode)			kW		
		Psb (Standby mode)			kW		
		Pto (Thermostat off)			kW		
	Integrated supplementary heater	Psup			kW		
Type of energy input			Electrical				
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,442	7,423	7,210
			ηs (Seasonal space heating efficiency)	%	136		140
			Prated at -10°C	kW	12.5		
			Qhe Annual energy consumption (GCV)	Gj	27		26

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Technical specifications				ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1	
Space heating Average climate water outlet 55°C	General	SCOP		3.47	3.48	3.58	
		Seasonal space heating eff. class			A++		
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.34	
			Pdh kW			7.6	
		B Condition (2°CDB/1°CWB)	PERd %			93.6	
			Cdh (Degradation heating)			1.0	
			COPd			3.50	
		C Condition (7°CDB/6°CWB)	Pdh kW			6.8	
			PERd %			140.0	
			Cdh (Degradation heating)			1.0	
		D Condition (12°CDB/11°CWB)	COPd			5.07	
			Pdh kW			4.5	
			PERd %			202.8	
		Tol (temperature operating limit)	Cdh (Degradation heating)			1.0	
			COPd			6.23	
			Pdh kW			5.2	
			PERd %			249.2	
			TOL °C			-10	
		Rated heat output supplementary capacity	WTOL °C			55	
			COPd		2.04		2.06
			Pdh kW		6.9		8.2
			PERd %		81.6		82.4
			Psup (at Tdesign -10°C) kW		5.6		4.3
		(bivalent temperature)	Tbiv COPd		2.90		2.48
			Pdh kW		8.5		10.0
			PERd %		116.0		99.2
Tbiv °C			-2		-5		
Annual energy consumption kWh			7,028		6,890	6,861	
Cold climate water outlet 55°C	General	ns (Seasonal space heating efficiency) %		123		126	
		Prated at -22°C kW				9.0	
		Qhe Annual energy consumption (GCV) GJ				25	
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0	
			COPd			2.61	
			Pdh kW			5.2	
		B Condition (2°CDB/1°CWB)	PERd %		104.2		104.4
			Cdh (Degradation heating)			1.0	

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Technical specifications				ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1	
Space heating Cold climate water outlet 55°C	B Condition (2°CDB- B/1°CWB)	COPd			3.90		
		Pdh	kW		3.3		
		PERd	%		156.0		
		Cdh (Degradation heating)				1.0	
		COPd			4.96		
		Pdh	kW		3.4		
		PERd	%		198.3		
		D Condition (12°CDB- B/11°CWB)				6.56	
		Pdh	kW		4.2		
	PERd	%		262.5			
	Tol (tem- perature operating limit)	COPd		1.49	1.56	1.62	
		Pdh	kW	4.9	6.1	7.2	
		PERd	%	59.6	62.3	64.7	
		TOL	°C		-22		
		WTOL	°C		55		
	G Condition (-15°CDB/-)	COPd		2.00		2.03	
		Pdh	kW	6.0		7.2	
		PERd	%	80.0		81.2	
	Tbiv (bivalent tempera- ture)	COPd		2.25		2.03	
		Pdh	kW	6.6		7.2	
		PERd	%	90.0		81.2	
		Tbiv	°C	-12		-15	
	Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1	2.9	1.8	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,853		
			ηs (Seasonal space heating efficiency)	%	177		
			Prated at 2°C	kW	9.6		
			Qhe Annual energy consumption (GCV)	Gj	10		
B Condition (2°CDB- B/1°CWB)		Cdh (Degradation heating)			1.0		
		COPd			2.66		
		Pdh	kW		8.0		
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)			1.0		
		COPd			3.79		
		Pdh	kW		6.7		
D Condition (12°CDB/11°CWB)		Cdh (Degradation heating)			1.0		
		COPd			5.87		
		PERd	%		151.5		

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Technical specifications				ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1		
Space heating	Warm climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Pdh	kW			3.6	
			PERd	%			234.9	
Average climate water outlet 35°C	General		Tbiv	COPd			3.13	
			Pdh	kW			8.4	
			PERd	%			125.4	
			Tbiv	°C			4	
			Annual energy consumption	kWh			3,462	3,440
			ηs (Seasonal space heating efficiency)	%			195	196
			Prated at -10°C	kW			8.3	
			Qhe Annual energy consumption (GCV)	Gj			12	
			SCOP				4.95	4.98
			Seasonal space heating eff. class				A+++	
A Condition (-7°CDB/-8°CWB)		COPd				3.20		
		Pdh	kW			7.5		
B Condition (2°CDB/1°CWB)		PERd	%			128.0		
		Cdh (Degradation heating)				1.0		
		COPd				4.93		
C Condition (7°CDB/6°CWB)		Pdh	kW			4.4		
		PERd	%			197.2		
		Cdh (Degradation heating)				1.0		
D Condition (12°CDB/11°CWB)		COPd				6.37		
		Pdh	kW			4.3		
		PERd	%			254.8		
Tol (temperature operating limit)		Cdh (Degradation heating)				1.0		
		COPd				8.13		
		Pdh	kW			6.6		
		PERd	%			325.2		
		TOL	°C			-10		
Tbiv (bivalent temperature)		WTOL	°C			35		
		COPd				2.90	2.86	
		Pdh	kW			6.9	8.1	
		PERd	%			116.0	114.4	
		Tbiv	°C			-7		
Rated heat output supplementary capacity		Psup (at Tdesign -10°C)	kW			1.4	0.0	

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Technical specifications				ELBX12E6V + ERRA08EW1	ELBX12E6V + ERRA10EW1	ELBX12E6V + ERRA12EW1		
Space heating 	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334	5,180	5,165	
			η_s (Seasonal space heating efficiency)	%	163	168	169	
			Prated at -22°C	kW	9			
			Qhe Annual energy consumption (GCV)	Gj	19.2	18.6		
		A Condition (-7°CDB- B/-8°CWB)	COPd			3.48		
				Pdh	kW		5.4	
				PERd	%		139.2	
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0		
				COPd			5.40	
				Pdh	kW		3.6	
		C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0		
				COPd			6.53	
				Pdh	kW		5.3	
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0		
				COPd			7.98	
				Pdh	kW		6.6	
		Tol (tem- perature operating limit)	PERd		%	319.0		319.2
				COPd		2.11	2.14	2.16
				Pdh	kW	4.9	5.9	6.5
				PERd	%	84.3	85.6	86.4
		G Condition (-15°CDB/-)	TOL		°C		-22	
				WTOL	°C		35	
				COPd		2.68		2.64
				Pdh	kW	6.0		7.0
Tbiv (bivalent tempera- ture)	PERd		%	107.1		105.6		
		COPd		2.95		2.64		
		Pdh	kW	6.5		7.0		
		PERd	%	118.1		105.6		
Rated heat output sup- plementary capacity	Tbiv		°C	-12		-15		
		Psup (at Tdesign -22°C)	kW	4.1	3.1	2.6		
Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,873				
		η_s (Seasonal space heating efficiency)	%	242				
		Prated at 2°C	kW	8.6				
		Qhe Annual energy consumption (GCV)	Gj	7				
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0		
				COPd			4.17	
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0				
		COPd			5.85			
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0				
		COPd			7.78			
Tbiv (bivalent tempera- ture)	PERd		%	166.8		166.8		
		Pdh	kW		5.5			
Tbiv (bivalent tempera- ture)	PERd		%	234.0		234.0		
		Pdh	kW		5.5			
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0				
		COPd			7.78			
Tbiv (bivalent tempera- ture)	PERd		%	195.6		195.6		
		Pdh	kW		6.1			
Tbiv (bivalent tempera- ture)	PERd		%	311.2		311.2		
		Pdh	kW		6.1			

(1)Capacity according to standard EN14511 and valid for heated water range $dT = 3-8^{\circ}\text{C}$ at $T_a 7^{\circ}\text{C}$ |

(2)Condition: T_a DB/WB $7^{\circ}\text{C}/6^{\circ}\text{C}$ - LWC 35°C (DT = 5°C) |

(3)Cooling: EW 12°C ; LW 7°C ; ambient conditions: 35°CDB |

(4)Cooling: EW 23°C ; LW 18°C ; ambient conditions: 35°CDB |

(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |


(6)DB/WB $7^{\circ}\text{C}/6^{\circ}\text{C}$ - LWC 35°C ($dT=5^{\circ}\text{C}$) with pump at full speed |

Test at T_a DB/WB $7^{\circ}\text{C}/6^{\circ}\text{C}$. According to EN 16147.

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Technical specifications					ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1	
Heating capacity	Min.			kW	3.45 (1)			
	Nom.			kW	6.17 (2)			
	Max.			kW	7.95 (1)	9.25 (1)	9.97 (1)	
Cooling capacity	Nom.			kW	6.81 (3) / 6.47 (4)	7.97 (3) / 6.47 (4)	8.62 (3) / 6.47 (4)	
Power input	Heating	Min.		kW	0.70 (5)			
		Nom.		kW	1.21 (2)			
		Max.		kW	1.63 (5)	1.98 (5)	2.21 (5)	
	Cooling	Nom.		kW	2.08 (3) / 1.13 (4)	2.57 (3) / 1.13 (4)	2.86 (3) / 1.13 (4)	
COP					5.10 (2)			
EER					3.28 (3) / 5.75 (4)			
Pump	Type				Grundfos UPM4L K 15-75 130 9 DK1			
	Nominal ESP unit	Heating		kPa	67.9 (6)			
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min	18.3			
General	Supplier/Manufacturer details	Name and address			Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium			
		Name or trademark			Daikin Europe N.V.			
	Product description	Air-to-water heat pump			Yes			
		Brine-to-water heat pump			No			
		Heat pump combination heater			Yes			
		Low-temperature heat pump			No			
		Supplementary heater integrated			Yes			
	LW(A) Sound power level (according to EN14825)	Indoor	Water-to-water heat pump			No		
			Power level		dB(A)	44.0		
	LW(A) Sound power level (according to EN14825)	Outdoor			dB(A)	56.0		
Sound condition Ecodesign and energy label					Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825			
Space heating general	Air to water unit	Rated airflow (outdoor)		m ³ /h	3,542			
		Other	Capacity control			Inverter		
		Pck (Crankcase heater mode)			kW			
		Poff (Off mode)			kW			
		Psb (Standby mode)			kW			
		Pto (Thermostat off)			kW			
	Integrated supplementary heater	Psup			kW			
	Type of energy input			Electrical				
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,442	7,423	7,210	
			ηs (Seasonal space heating efficiency)	%	136			
			Prated at -10°C	kW	12.5			
			Qhe Annual energy consumption (GCV)	Gj	27			
					26			

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Technical specifications				ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1		
Space heating 	Average climate water outlet 55°C	General	SCOP	3.47	3.48	3.58		
			Seasonal space heating eff. class	A++				
			A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)	1.0			
				COPd	2.34			
				Pdh kW	7.6			
				PERd %	93.6			
				B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)	1.0		
					COPd	3.50		
					Pdh kW	6.8		
					PERd %	140.0		
				C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)	1.0		
					COPd	5.07		
					Pdh kW	4.5		
					PERd %	202.8		
				D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	1.0		
					COPd	6.23		
					Pdh kW	5.2		
					PERd %	249.2		
				Tol (temperature operating limit)	COPd	2.04	2.06	
					Pdh kW	6.9	8.2	
					PERd %	81.6	82.4	
					TOL °C	-10		
					WTOL °C	55		
				Rated heat output supplementary capacity	Psup (at Tdesign -10°C) kW	5.6	4.3	
					Tbiv COPd	2.90		2.48
					Pdh kW	8.5		10.0
					PERd %	116.0		99.2
					Tbiv °C	-2		-5
			Cold climate water outlet 55°C	General	Annual energy consumption kWh	7,028	6,890	6,861
					ηs (Seasonal space heating efficiency) %	123		126
Prated at -22°C kW	9.0							
Qhe Annual energy consumption (GCV) GJ	25							
A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)	1.0						
	COPd	2.61						
	Pdh kW	5.2						
	PERd %	104.2			104.4			
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)	1.0						

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Technical specifications				ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1		
Space heating 	Cold climate water outlet 55°C	B Condition (2°CDB- B/1°CWB)	COPd		3.90			
			Pdh	kW	3.3			
		C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)		1.0			
			COPd		4.96			
		D Condition (12°CDB- B/11°CWB)	Pdh	kW	3.4			
			PERd	%	198.3			
	Tol (tem- perature operating limit)	COPd		1.49	1.56	1.62		
			Pdh	kW	4.9	6.1	7.2	
		PERd		59.6	62.3	64.7		
			TOL	°C		-22		
	Warm climate water outlet 55°C	General	WTOL	°C		55		
			G Condition (-15°CDB/-)	COPd		2.00		2.03
				Pdh	kW	6.0		7.2
		PERd		%	80.0		81.2	
		Tbiv (bivalent tempera- ture)	COPd		2.25		2.03	
				Pdh	kW	6.6		7.2
				PERd	%	90.0		81.2
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	Tbiv	°C	-12		-15
					kW	4.1	2.9	1.8
		Warm climate water outlet 55°C	General	Annual energy consumption	kWh		2,853	
				ηs (Seasonal space heating efficiency)	%		177	
	Prated at 2°C			kW		9.6		
	Qhe Annual energy consumption (GCV)			Gj		10		
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			COPd		1.0		
			Pdh	kW	8.0			
			PERd	%	106.5			
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)		COPd		1.0			
			Pdh	kW	6.7			
			PERd	%	151.5			
D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)		COPd		1.0			
			COPd		5.87			

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Technical specifications				ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1	
Space heating Warm climate water outlet 55°C Average climate water outlet 35°C A Condition (-7°C-D B/-8°CWB) B Condition (2°C-D B/1°CWB) C Condition (7°C-D B/6°CWB) D Condition (12°C-D B/11°CWB) Tol (temperature operating limit) Tbiv (bivalent temperature) Rated heat output supplementary capacity	D Condition (12°C-D B/11°CWB)	Pdh	kW		3.6		
		PERd	%		234.9		
	Tbiv	COPd			3.13		
		Pdh	kW		8.4		
		PERd	%		125.4		
		Tbiv	°C		4		
	General	Annual energy consumption	kWh		3,462		3,440
		ηs (Seasonal space heating efficiency)	%		195		196
		Prated at -10°C	kW			8.3	
		Qhe Annual energy consumption (GCV)	Gj			12	
		SCOP			4.95		4.98
		Seasonal space heating eff. class				A+++	
		COPd				3.20	
		Pdh	kW			7.5	
		PERd	%			128.0	
		Cdh (Degradation heating)				1.0	
		COPd				4.93	
		Pdh	kW			4.4	
		PERd	%			197.2	
		Cdh (Degradation heating)				1.0	
		COPd				6.37	
		Pdh	kW			4.3	
		PERd	%			254.8	
		Cdh (Degradation heating)				1.0	
		COPd				8.13	
		Pdh	kW			6.6	
		PERd	%			325.2	
	COPd			2.90		2.86	
	Pdh	kW		6.9		8.1	
	PERd	%		116.0		114.4	
	TOL	°C			-10		
	WTOL	°C			35		
	COPd			3.20		2.86	
	Pdh	kW		7.5		8.1	
	PERd	%		128.0		114.4	
	Tbiv	°C		-7		-10	
	Psup (at Tdesign -10°C)	kW		1.4		0.0	

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Technical specifications				ELBX12E9W + ERRA08EW1	ELBX12E9W + ERRA10EW1	ELBX12E9W + ERRA12EW1			
Space heating	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334	5,180	5,165		
			η_s (Seasonal space heating efficiency)	%	163	168	169		
			Prated at -22°C	kW	9				
			Qhe Annual energy consumption (GCV)	Gj	19.2	18.6			
			A Condition (-7°CDB)	COPd		3.48			
				Pdh	kW	5.4			
				PERd	%	139.2			
			B Condition (2°CDB)	Cdh (Degradation heating)		1.0			
				COPd		5.40			
				Pdh	kW	3.6			
			B/1°CWB)	PERd	%	216.0			
				C Condition (7°CDB)	Cdh (Degradation heating)		1.0		
					COPd		6.53		
			Pdh		kW	5.3			
			B/6°CWB)	PERd	%	261.2			
				D Condition (12°CDB)	Cdh (Degradation heating)		1.0		
					COPd		7.98		
			Pdh		kW	6.6			
			B/11°CWB)	PERd	%	319.0	319.2		
				Tol (temperature operating limit)	COPd		2.11	2.14	2.16
					Pdh	kW	4.9	5.9	6.5
			PERd		%	84.3	85.6	86.4	
			TOL	TOL	°C	-22			
WTOL	°C	35							
G Condition (-15°CDB/-)	COPd			2.68	2.64				
	Pdh	kW	6.0	7.0					
	PERd	%	107.1	105.6					
Tbiv (bivalent temperature)	COPd		2.95	2.64					
	Pdh	kW	6.5	7.0					
	PERd	%	118.1	105.6					
Tbiv	Tbiv	°C	-12						
	Rated heat output supplementary capacity	Psup (at Tdesign -22°C)	kW	4.1	3.1	2.6			
		Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,873			
η_s (Seasonal space heating efficiency)				%	242				
Prated at 2°C	kW			8.6					
Qhe Annual energy consumption (GCV)	Gj			7					
Cdh (Degradation heating)				1.0					
B Condition (2°CDB)	B/1°CWB)	COPd		4.17					
		Pdh	kW	6.8					
		PERd	%	166.8					
C Condition (7°CDB)	B/6°CWB)	Cdh (Degradation heating)		1.0					
		COPd		5.85					
		Pdh	kW	5.5					
B/6°CWB)	Tbiv (bivalent temperature)	PERd	%	234.0					
		COPd		4.89					
		Pdh	kW	6.8					
Tbiv	D Condition (12°CDB)	PERd	%	195.6					
		Tbiv	°C	5					
		Cdh (Degradation heating)		1.0					
D Condition (12°CDB)	B/11°CWB)	COPd		7.78					
		Pdh	kW	6.1					
		PERd	%	311.2					

 (1)Capacity according to standard EN14511 and valid for heated water range $dT = 3-8^{\circ}C$ at $T_a 7^{\circ}C$ |

 (2)Condition: T_a DB/WB $7^{\circ}C/6^{\circ}C$ - LWC $35^{\circ}C$ (DT = $5^{\circ}C$) |

 (3)Cooling: EW $12^{\circ}C$; LW $7^{\circ}C$; ambient conditions: $35^{\circ}CDB$ |

 (4)Cooling: EW $23^{\circ}C$; LW $18^{\circ}C$; ambient conditions: $35^{\circ}CDB$ |

(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

 (6)DB/WB $7^{\circ}C/6^{\circ}C$ - LWC $35^{\circ}C$ ($dT=5^{\circ}C$) with pump at full speed |

 Test at T_a DB/WB $7^{\circ}C/6^{\circ}C$. According to EN 16147.

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Technical specifications				ELSH12P30E + ERRA08EW1	ELSH12P50E + ERRA08EW1	ELSH12P30E + ERRA10EW1	ELSH12P50E + ERRA10EW1	ELSH12P30E + ERRA12EW1	ELSH12P50E + ERRA12EW1	
Heating capacity	Min.		kW	3.45 (1)						
	Nom.		kW	6.17 (2)						
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)		
Power input	Heating	Min.	kW	0.70 (3)						
		Nom.	kW	1.21 (2)						
		Max.	kW	1.63 (3)		1.98 (3)		2.21 (3)		
	Domestic hot water from 10°C to 50°C	Nom.	kWh	3.44 (4)	4.65 (4)	3.44 (4)	4.65 (4)	3.44 (4)	4.65 (4)	
			hr	2h29min	3h45min	2h29min	3h45min	2h29min	3h45min	
COP				5.10 (2)						
Pump	Type	Grundfos UPM4L K 20-75 CHBL 3 RT								
	Nominal ESP unit	Heating	kPa	55.4 (5)						
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min						
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium						
		Name or trademark		Daikin Europe N.V.						
	Product description	Air-to-water heat pump		Yes						
		Brine-to-water heat pump		No						
		Heat pump combination heater		Yes						
		Low-temperature heat pump		No						
		Supplementary heater integrated		No						
		Water-to-water heat pump		No						
	LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.7					
	LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	56.0					
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825						
Space heating general	Air to water unit	Rated airflow (outdoor)		m ³ /h						
				3,542						
	Other	Capacity control		Inverter						
		Pck (Crankcase heater mode)		kW						
		Poff (Off mode)		kW						
		Psb (Standby mode)		kW						
Pto (Thermostat off)		kW								
Domestic hot water heating	General	Declared load profile		L	XL	L	XL	L	XL	
		Average climate	AEC (Annual electricity consumption)	kWh	858	1,235	858	1,235	858	1,235
	Climate	COPdhw		2.83						
		Heat up time		2h 29min	3h 28min	2h 29min	3h 28min	2h 29min	3h 28min	
		η _{wh} (water heating efficiency)		%						
		Qelec (Daily electricity consumption)		kWh						
		Reference hot water temperature		°C						
		Stand-by power input		W						
		Water heating energy efficiency class		A+						
		Cold climate		AEC (Annual electricity consumption)	kWh	1,152	1,457	1,152	1,457	1,152
Domestic hot water heating	Cold climate	COPdhw		2.12						
		Heat up time		2h 23min	3h 37min	2h 23min	3h 37min	2h 23min	3h 37min	
	η _{wh} (water heating efficiency)		%							
	Qelec (Daily electricity consumption)		kWh							
	Reference hot water temperature		°C							
	Stand-by power input		W							
	Warm climate		AEC (Annual electricity consumption)	kWh	759	1,021	759	1,021	759	1,021
	COPdhw		3.19							
	Heat up time		2h 18min	3h 17min	2h 18min	3h 17min	2h 18min	3h 17min		
	η _{wh} (water heating efficiency)		%							
Qelec (Daily electricity consumption)		kWh								
Reference hot water temperature		°C								
Stand-by power input		W								

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Technical specifications				ELSH12P30E + ERRA08EW1	ELSH12P50E + ERRA08EW1	ELSH12P30E + ERRA10EW1	ELSH12P50E + ERRA10EW1	ELSH12P30E + ERRA12EW1	ELSH12P50E + ERRA12EW1	
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309	
			ηs (Seasonal space heating efficiency)	%		134		138		
			Prated at -10°C	kW			12.5			
			Qhe Annual energy consumption (GCV)	Gj		27		26		
			SCOP		3.42		3.43		3.53	
			Seasonal space heating eff. class				A++			
			A Condition (-7°CDB)	Cdh (Degradation heating)	COPd			1.0		
					Pdh	kW		2.34		
					PERd	%		7.6		
					PERd	%		93.6		
			B Condition (2°CDB)	Cdh (Degradation heating)	COPd			3.50		
					Pdh	kW		6.8		
					PERd	%		140.0		
					PERd	%		140.0		
			C Condition (7°CDB)	Cdh (Degradation heating)	COPd			5.07		
					Pdh	kW		4.5		
					PERd	%		202.8		
					PERd	%		202.8		
			D Condition (12°CDB)	Cdh (Degradation heating)	COPd			6.23		
					Pdh	kW		5.2		
PERd	%				249.2					
PERd	%				249.2					
Space heating	Average climate water outlet 55°C	General	Tol (temperature operating limit)	COPd	2.04		2.06			
				Pdh	kW	6.9		8.2		
				PERd	%	81.6		82.4		
				TOL	°C			-10		
				WTOL	°C			55		
			Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	5.6		4.3		
			Tbiv (bivalent temperature)	COPd			2.90		2.48	
					Pdh	kW	8.5		10.0	
					PERd	%	116.0		99.2	
					Tbiv	°C	-2		-5	
Cold climate water outlet 55°C	General	Annual energy consumption	kWh	7,088		6,950		6,921		
		ηs (Seasonal space heating efficiency)	%	122		125				
		Prated at -22°C	kW			9.0				
		Qhe Annual energy consumption (GCV)	Gj	26		25				
		A Condition (-7°CDB)	Cdh (Degradation heating)	COPd			1.0			
				Pdh	kW		2.61			
				PERd	%	104.2		104.4		
				PERd	%	104.2		104.4		
		B Condition (2°CDB)	Cdh (Degradation heating)	COPd			3.90			
				Pdh	kW		3.3			
				PERd	%		156.0			
				PERd	%		156.0			
		C Condition (7°CDB)	Cdh (Degradation heating)	COPd			4.96			
				Pdh	kW		3.4			
				PERd	%		198.3			
				PERd	%		198.3			
		D Condition (12°CDB)	COPd			6.56				
				Pdh	kW		4.2			
				PERd	%		262.5			
				PERd	%		262.5			
Tol (temperature operating limit)	COPd			1.49		1.56		1.62		
		Pdh	kW	4.9		6.1		7.2		
		PERd	%	59.6		62.3		64.7		
		TOL	°C			-22				
		WTOL	°C			55				
G Condition (-15°CDB/-)	COPd			2.00		2.03				
		Pdh	kW	6.0		7.2				

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Technical specifications				ELSH12P30E + ERRA08EW1	ELSH12P50E + ERRA08EW1	ELSH12P30E + ERRA10EW1	ELSH12P50E + ERRA10EW1	ELSH12P30E + ERRA12EW1	ELSH12P50E + ERRA12EW1
Space heating 	Cold climate water outlet 55°C	G Condition (-15°CDB/-)	PERd	%	80.0			81.2	
			Tbiv	COPd				2.03	
		(bivalent tempera- ture)	Pdh	kW	6.6			7.2	
			PERd	%	90.0			81.2	
			Tbiv	°C	-12			-15	
	Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh			2,972		
			ηs (Seasonal space heating efficiency)	%			170		
			Prated at 2°C	kW			9.6		
			Qhe Annual energy consumption (GCV)	Gj			11		
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)				1.0		
			COPd				2.66		
			Pdh	kW			8.0		
		C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)				1.0		
			COPd				3.79		
Pdh			kW			6.7			
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)				1.0				
	COPd				5.87				
	Pdh	kW			3.6				
Tbiv (bivalent tempera- ture)	COPd				3.13				
	Pdh	kW			8.4				
	PERd	%			125.4				
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,561			3,539		
		ηs (Seasonal space heating efficiency)	%	190			191		
		Prated at -10°C	kW			8.3			
		Qhe Annual energy consumption (GCV)	Gj			13			
		SCOP		4.81			4.84		
	Seasonal space heating eff. class					A+++			
	A Condition (-7°CDB- B/-8°CWB)	COPd				3.20			
Pdh		kW			7.5				
B Condition (2°CDB/1°CWB)	PERd	%			128.0				
	Cdh (Degradation heating)				1.0				
		COPd			4.93				

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Technical specifications					ELSH12P30E + ERRA08EW1	ELSH12P50E + ERRA08EW1	ELSH12P30E + ERRA10EW1	ELSH12P50E + ERRA10EW1	ELSH12P30E + ERRA12EW1	ELSH12P50E + ERRA12EW1	
Space heating Average climate water outlet 35°C	B Condition (2°CDB/1°CWB)	Pdh	kW					4.4			
		PERd	%					197.2			
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)						1.0			
		COPd						6.37			
		Pdh	kW					4.3			
		PERd	%					254.8			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)						1.0			
		COPd						8.13			
		Pdh	kW					6.6			
		PERd	%					325.2			
	Tol (tem- perature operating limit)	COPd				2.90			2.86		
		Pdh				6.9			8.1		
		PERd				116.0			114.4		
		TOL							-10		
	Tbiv (bivalent tempera- ture)	COPd				3.20			2.86		
		Pdh				7.5			8.1		
		PERd				128.0			114.4		
		Tbiv				-7			-10		
	Rated heat output sup- plementary capacity	Psup (at Tdesign -10°C)				1.4			0.0		
Cold climate water outlet 35°C	General	Annual energy consumption		kWh	5,394		5,239		5,224		
		ηs (Seasonal space heating efficiency)		%	162		166		167		
		Prated at -22°C		kW				9			
		Qhe Annual energy consumption (GCV)		Gj	19.4		18.9		18.8		
A Condition (-7°CDB/-8°CWB)	COPd						3.48				
	Pdh						5.4				
	PERd						139.2				
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)						1.0				
	COPd						5.40				
	Pdh						3.6				
C Condition (7°CDB/6°CWB)	PERd						216.0				
	Cdh (Degradation heating)						1.0				
	COPd						6.53				
D Condition (12°CDB/11°CWB)	Pdh						5.3				
	PERd						261.2				
	Cdh (Degradation heating)						1.0				
COPd						7.98					

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Technical specifications				ELSH12P30E + ERRA08EW1	ELSH12P50E + ERRA08EW1	ELSH12P30E + ERRA10EW1	ELSH12P50E + ERRA10EW1	ELSH12P30E + ERRA12EW1	ELSH12P50E + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	D Condition (12°CDB- B/11°CWB)	Pdh	kW	6.6					
			PERd	%	319.0		319.2			
		Tol (tem- perature operating limit)	COPd		2.11		2.14		2.16	
			Pdh	kW	4.9		5.9		6.5	
			PERd	%	84.3		85.6		86.4	
			TOL	°C	-22					
		G Condition (-15°CDB/-)	WTOL	°C	35					
			COPd		2.68		2.64			
			Pdh	kW	6.0		7.0			
		Tbiv (bivalent tempera- ture)	PERd	%	107.1		105.6			
	COPd			2.95		2.64				
	Pdh		kW	6.5		7.0				
	PERd		%	118.1		105.6				
	Rated heat output sup- plementary capacity	Tbiv	Tbiv	°C	-12		-15			
			Psup (at Tdesign -22°C)	kW	4.1		3.1		2.6	
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh	1,993					
			ηs (Seasonal space heating efficiency)	%	228					
			Prated at 2°C	kW	8.6					
			Qhe Annual energy consumption (GCV)	Gj	7					
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)		1.0					
COPd				4.17						
Pdh			kW	6.8						
PERd			%	166.8						
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)		1.0						
		COPd		5.85						
	Pdh	kW	5.5							
	PERd	%	234.0							
Tbiv (bivalent tempera- ture)	COPd		4.89							
	Pdh	kW	6.8							
	PERd	%	195.6							
	Tbiv	°C	5							
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)		1.0							
	COPd		7.78							
	Pdh	kW	6.1							
	PERd	%	311.2							

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)	
Cooling capacity	Nom.		kW	6.81 (3) / 6.47 (4)		7.97 (3) / 6.47 (4)		8.62 (3) / 6.47 (4)	
Power input	Heating	Min.	kW	0.70 (5)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (5)		1.98 (5)		2.21 (5)	
	Cooling	Nom.	kW	2.08 (3) / 1.13 (4)		2.57 (3) / 1.13 (4)		2.86 (3) / 1.13 (4)	
		Domestic hot water from 10°C to 50°C	Nom.	kWh	3.44 (6)	4.65 (6)	3.44 (6)	4.65 (6)	3.44 (6)
Heat up time from 10°C to 50°C			hr	2h29min	3h45min	2h29min	3h45min	2h29min	3h45min
COP				5.10 (2)					
EER				3.28 (3) / 5.75 (4)		3.10 (4) / 5.75		3.01 (3) / 5.75 (4)	
Pump	Type			Grundfos UPM4L K 20-75 CHBL 3 RT					
	Nominal ESP Heating unit		kPa	55.4 (7)					
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min					
				18.3					

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Technical specifications			ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1			
General	Supplier/ Manufacturer details	Name and address Name or trademark	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Daikin Europe N.V.								
	Product description	Air-to-water heat pump					Yes				
		Brine-to-water heat pump					No				
		Heat pump combination heater					Yes				
		Low-temperature heat pump					No				
		Supplementary heater integrated					No				
		Water-to-water heat pump					No				
	LW(A) Sound power level (according to EN14825)	Indoor	dB(A)				44.7				
	LW(A) Sound power level (according to EN14825)	Outdoor	dB(A)				56.0				
	Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h		3,542						
	Other	Capacity control	Inverter								
		Pck (Crankcase heater mode)	kW	0.000							
		Poff (Off mode)	kW	0.027							
		Psb (Standby mode)	kW	0.027							
		Pto (Thermostat off)	kW	0.024							
Domestic hot water heating	General	Declared load profile	L	XL	L	XL	L	XL			
	Average climate	AEC (Annual electricity consumption)	kWh	858	1,235	858	1,235	858	1,235		
		COPdhw		2.83	3.29	2.83	3.29	2.83	3.29		
		Heat up time		2h 29min	3h 28min	2h 29min	3h 28min	2h 29min	3h 28min		
Domestic hot water heating	Average climate	η _{wh} (water heating efficiency)	%	119	136	119	136	119	136		
		Qelec (Daily electricity consumption)	kWh	4.120	5.800	4.120	5.800	4.120	5.800		
		Reference hot water temperature	°C	47.2	44.7	47.2	44.7	47.2	44.7		
		Stand-by power input	W	37.4	32.5	37.4	32.5	37.4	32.5		
		Water heating energy efficiency class		A+							
	Cold climate	AEC (Annual electricity consumption)	kWh	1,152	1,457	1,152	1,457	1,152	1,457		
		COPdhw		2.12	2.80	2.12	2.80	2.12	2.80		
		Heat up time		2h 23min	3h 37 min	2h 23min	3h 37 min	2h 23min	3h 37 min		
		η _{wh} (water heating efficiency)	%	89	115	89	115	89	115		
		Qelec (Daily electricity consumption)	kWh	5.500	6.820	5.500	6.820	5.500	6.820		
Warm climate	Reference hot water temperature	°C	46.3	44.7	46.3	44.7	46.3	44.7			
	Stand-by power input	W	45.5	34.3	45.5	34.3	45.5	34.3			
	AEC (Annual electricity consumption)	kWh	759	1,021	759	1,021	759	1,021			
	COPdhw		3.19	3.96	3.19	3.96	3.19	3.96			
	Heat up time		2h 18min	3h 17min	2h 18min	3h 17min	2h 18min	3h 17min			
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,442		7,423		7,210		
			η _s (Seasonal space heating efficiency)	%	136				140		
		Prated at -10°C	kW	12.5							
		Qhe Annual energy consumption (GCV)	Gj	27				26			
		SCOP		3.47		3.48		3.58			
		Seasonal space heating eff. class			A++						
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0						
			COPd		2.34						
		B Condition (2°CDB/1°CWB)	Pdh	kW	7.6						
			PERd	%	93.6						
Cdh (Degradation heating)			1.0								
C Condition (7°CDB/6°CWB)	COPd		3.50								
	Pdh	kW	6.8								
C Condition (7°CDB/6°CWB)	PERd	%	140.0								
	Cdh (Degradation heating)		1.0								
	COPd		5.07								
B/6°CWB)	Pdh	kW	4.5								
	PERd	%	202.8								

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Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1	
Space heating 	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	1.0						
			COPd	6.23						
			Pdh kW	5.2						
			PERd %	249.2						
		Tol (temperature operating limit)	COPd	2.04			2.06			
				6.9			8.2			
			Pdh kW	81.6			82.4			
				-10			-10			
			TOL °C	55			55			
				WTOL °C			WTOL °C			
	Rated heat output supplementary capacity	Psup (at Tdesign -10°C) kW	5.6			4.3				
			Tbiv COPd			2.90				
		(bivalent temperature)	Pdh kW	8.5			10.0			
			PERd %	116.0			99.2			
	Cold climate water outlet 55°C	General	Annual energy consumption kWh	7,028			6,890			
			ηs (Seasonal space heating efficiency) %	123			126			
			Prated at -22°C kW	9.0			9.0			
			Qhe Annual energy consumption (GCV) GJ	25			25			
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)	COPd	1.0					
				COPd	2.61					
Pdh kW				5.2						
PERd %				104.2			104.4			
B Condition (2°CDB/1°CWB)		Cdh (Degradation heating)	COPd	1.0						
			COPd	3.90						
	Pdh kW		3.3							
	PERd %		156.0							
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)	COPd	1.0							
		COPd	4.96							
		Pdh kW	3.4							
		PERd %	198.3							
D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	COPd	6.56							
		Pdh kW	4.2							
		PERd %	262.5							
		Tol (temperature operating limit)	COPd	1.49			1.56			
4.9				6.1						
Pdh kW	59.6			62.3						
	-22			-22						
TOL °C	-22			-22						
	WTOL °C			WTOL °C						

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Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1		
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	WTOL °C	55							
		G Condition (-15°CDB/-)	COPd	2.00					2.03		
			Pdh	kW	6.0					7.2	
			PERd	%	80.0					81.2	
		Tbiv (bivalent tempera- ture)	COPd	2.25					2.03		
			Pdh	kW	6.6					7.2	
			PERd	%	90.0					81.2	
		Rated heat output sup- plementary capacity	Tbiv	°C	-12					-15	
			Psup (at Tdesign -22°C)	kW	4.1			2.9			1.8
		Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,853					
ηs (Seasonal space heating efficiency)	%			177							
Prated at 2°C	kW			9.6							
Qhe Annual energy consumption (GCV)	Gj			10							
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0							
	COPd			2.66							
	Pdh		kW	8.0							
	PERd		%	106.5							
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0							
	COPd			3.79							
	Pdh		kW	6.7							
	PERd		%	151.5							
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0							
	COPd			5.87							
	Pdh		kW	3.6							
	PERd		%	234.9							
Tbiv (bivalent tempera- ture)	COPd			3.13							
	Pdh		kW	8.4							
	PERd		%	125.4							
	Tbiv	°C	4								
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,462					3,440		
		ηs (Seasonal space heating efficiency)	%	195					196		
		Prated at -10°C	kW	8.3							
		Qhe Annual energy consumption (GCV)	Gj	12							
		SCOP		4.95					4.98		
	Seasonal space heating eff. class		A+++								
	A Condition (-7°CDB/-8°CWB)	COPd		3.20							
Pdh	kW	7.5									

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Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1	
Space heating 	Average climate water outlet 35°C	A Condition (-7°C-D B/-8°CWB)	PERd %	128.0						
		B Condition (2°C-D B/1°CWB)	Cdh (Degradation heating)		1.0					
	COPd			4.93						
	Pdh kW			4.4						
	PERd %			197.2						
	C Condition (7°C-D B/6°CWB)	Cdh (Degradation heating)		1.0						
		COPd		6.37						
		Pdh kW		4.3						
		PERd %		254.8						
	D Condition (12°C-D B/11°CWB)	Cdh (Degradation heating)		1.0						
		COPd		8.13						
		Pdh kW		6.6						
		PERd %		325.2						
	Tol (temperature operating limit)	COPd		2.90				2.86		
		Pdh kW		6.9				8.1		
		PERd %		116.0				114.4		
		TOL °C		-10						
	Tbiv (bivalent temperature)	WTOL °C		35						
		COPd		3.20				2.86		
		Pdh kW		7.5				8.1		
		PERd %		128.0				114.4		
	Rated heat output supplementary capacity	Tbiv °C		-7				-10		
		Psup (at Tdesign -10°C) kW		1.4				0.0		
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334		5,180		5,165	
			ηs (Seasonal space heating efficiency)	%	163		168		169	
			Prated at -22°C	kW	9					
			Qhe Annual energy consumption (GCV)	Gj	19.2				18.6	
		A Condition (-7°C-D B/-8°CWB)	COPd		3.48					
	B Condition (2°C-D B/1°CWB)	Pdh kW		5.4						
		PERd %		139.2						
Cdh (Degradation heating)			1.0							
COPd			5.40							
C Condition (7°C-D B/6°CWB)	Pdh kW		3.6							
	PERd %		216.0							
	Cdh (Degradation heating)		1.0							
D Condition (12°C-D B/11°CWB)	COPd		6.53							
	Pdh kW		5.3							

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Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1		
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB/ B/6°CWB)	PERd	%	261.2						
			D Condition (12°CDB/ B/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.98						
			Pdh	kW	6.6						
			PERd	%	319.0		319.2				
		Tol (tem- perature operating limit)		COPd		2.11		2.14		2.16	
				Pdh	kW	4.9		5.9		6.5	
				PERd	%	84.3		85.6		86.4	
				TOL	°C	-22					
			WTOL	°C	35						
	G Condition (-15°CDB/-)		COPd		2.68		2.64				
			Pdh	kW	6.0		7.0				
			PERd	%	107.1		105.6				
	Tbiv (bivalent tempera- ture)		COPd		2.95		2.64				
			Pdh	kW	6.5		7.0				
			PERd	%	118.1		105.6				
		Tbiv	°C	-12		-15					
	Rated heat output sup- plementary capacity		Psup (at Tdesign -22°C)	kW	4.1		3.1		2.6		
	Warm climate water outlet 35°C	General		Annual energy consumption	kWh	1,873					
				ηs (Seasonal space heating efficiency)	%	242					
			Prated at 2°C	kW	8.6						
			Qhe Annual energy consumption (GCV)	Gj	7						
B Condition (2°CDB/ B/1°CWB)			Cdh (Degradation heating)		1.0						
			COPd		4.17						
			Pdh	kW	6.8						
			PERd	%	166.8						
C Condition (7°CDB/ B/6°CWB)			Cdh (Degradation heating)		1.0						
			COPd		5.85						
		Pdh	kW	5.5							
		PERd	%	234.0							
Tbiv (bivalent tempera- ture)		COPd		4.89							
		Pdh	kW	6.8							
		PERd	%	195.6							
	Tbiv	°C	5								
D Condition (12°CDB/ B/11°CWB)		Cdh (Degradation heating)		1.0							
		COPd		7.78							
		Pdh	kW	6.1							
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB/ B/11°CWB)	PERd	%	311.2						

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
 (2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |
 (3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
 (4)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
 (5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
 (6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
 (7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)	
Power input	Heating	Min.	kW	0.70 (3)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (3)		1.98 (3)		2.21 (3)	
	Domestic hot water from 10°C to 50°C	Nom.	kWh	3.44 (4)	4.65 (4)	3.44 (4)	4.65 (4)	3.44 (4)	4.65 (4)
Heat up time from 10°C to 50°C		hr	2h29min	3h45min	2h29min	3h45min	2h29min	3h45min	
COP			5.10 (2)						

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Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1		
Pump	Type	Grundfos UPM4L K 20-75 CHBL 3 RT									
	Nominal ESP Heating unit	kPa	55.4 (5)								
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3							
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
		Name or trademark		Daikin Europe N.V.							
	Product description	Air-to-water heat pump			Yes						
		Brine-to-water heat pump			No						
		Heat pump combination heater			Yes						
		Low-temperature heat pump			No						
		Supplementary heater integrated			No						
		Water-to-water heat pump			No						
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	44.7								
LW(A) Sound power level (according to EN14825)	Outdoor	dB(A)	56.0								
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542							
	Other	Capacity control			Inverter						
		Pck (Crankcase heater mode)		kW	0.000						
		Poff (Off mode)		kW	0.027						
		Psb (Standby mode)		kW	0.027						
		Pto (Thermostat off)		kW	0.024						
Domestic hot water heating 	General	Declared load profile		L	XL	L	XL	L	XL		
	Average climate	AEC (Annual electricity consumption)	kWh	858	1,235	858	1,235	858	1,235		
		COPdhw		2.83	3.29	2.83	3.29	2.83	3.29		
		Heat up time		2h 29min	3h 28min	2h 29min	3h 28min	2h 29min	3h 28min		
		η _{wh} (water heating efficiency)	%	119	136	119	136	119	136		
		Qelec (Daily electricity consumption)	kWh	4.120	5.800	4.120	5.800	4.120	5.800		
		Reference hot water temperature	°C	47.2	44.7	47.2	44.7	47.2	44.7		
		Stand-by power input	W	37.4	32.5	37.4	32.5	37.4	32.5		
Water heating energy efficiency class			A+								
Cold climate	AEC (Annual electricity consumption)	kWh	1,152	1,457	1,152	1,457	1,152	1,457			
	COPdhw		2.12	2.80	2.12	2.80	2.12	2.80			
	Heat up time		2h 23min	3h 37 min	2h 23min	3h 37 min	2h 23min	3h 37 min			
	η _{wh} (water heating efficiency)	%	89	115	89	115	89	115			
	Qelec (Daily electricity consumption)	kWh	5.500	6.820	5.500	6.820	5.500	6.820			
	Reference hot water temperature	°C	46.3	44.7	46.3	44.7	46.3	44.7			
	Stand-by power input	W	45.5	34.3	45.5	34.3	45.5	34.3			
	Water heating energy efficiency class		A+								
Warm climate	AEC (Annual electricity consumption)	kWh	759	1,021	759	1,021	759	1,021			
	COPdhw		3.19	3.96	3.19	3.96	3.19	3.96			
	Heat up time		2h 18min	3h 17min	2h 18min	3h 17min	2h 18min	3h 17min			
	η _{wh} (water heating efficiency)	%	135	164	135	164	135	164			
	Qelec (Daily electricity consumption)	kWh	3.650	4.820	3.650	4.820	3.650	4.820			
	Reference hot water temperature	°C	47.2	44.7	47.2	44.7	47.2	44.7			
	Stand-by power input	W	35.2	30.7	35.2	30.7	35.2	30.7			
	Water heating energy efficiency class		A+								

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Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309		
			ηs (Seasonal space heating efficiency)	%		134		138			
			Prated at -10°C	kW			12.5				
			Qhe Annual energy consumption (GCV)	Gj		27		26			
			SCOP		3.42		3.43		3.53		
			Seasonal space heating eff. class				A++				
			A Condition (-7°CDB)	Cdh (Degradation heating)			1.0				
				COPd			2.34				
				Pdh	kW		7.6				
				PERd	%		93.6				
			B Condition (2°CDB)	Cdh (Degradation heating)			1.0				
				COPd			3.50				
				Pdh	kW		6.8				
				PERd	%		140.0				
			C Condition (7°CDB)	Cdh (Degradation heating)			1.0				
				COPd			5.07				
				Pdh	kW		4.5				
				PERd	%		202.8				
			D Condition (12°CDB)	Cdh (Degradation heating)			1.0				
				COPd			6.23				
	Pdh	kW		5.2							
	PERd	%		249.2							
Space heating	Average climate water outlet 55°C	General	Tol (temperature operating limit)	COPd	2.04		2.06				
				Pdh	kW	6.9		8.2			
				PERd	%	81.6		82.4			
				TOL	°C			-10			
				WTOL	°C			55			
			Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	5.6		4.3			
			Tbiv (bivalent temperature)	COPd		2.90		2.48			
				Pdh	kW	8.5		10.0			
				PERd	%	116.0		99.2			
				Tbiv	°C	-2		-5			
			Cold climate water outlet 55°C	General	Annual energy consumption	kWh	7,088		6,950		6,921
					ηs (Seasonal space heating efficiency)	%	122		125		
					Prated at -22°C	kW			9.0		
					Qhe Annual energy consumption (GCV)	Gj	26		25		
					A Condition (-7°CDB)	Cdh (Degradation heating)			1.0		
						COPd			2.61		
						Pdh	kW		5.2		
						PERd	%	104.2		104.4	
					B Condition (2°CDB)	Cdh (Degradation heating)			1.0		
						COPd			3.90		
	Pdh	kW				3.3					
	PERd	%				156.0					
C Condition (7°CDB)	Cdh (Degradation heating)					1.0					
	COPd					4.96					
	Pdh	kW				3.4					
	PERd	%				198.3					
D Condition (12°CDB)	COPd					6.56					
	Pdh	kW				4.2					
	PERd	%				262.5					
Tol (temperature operating limit)	COPd				1.49		1.62				
	Pdh	kW	4.9		6.1						
	PERd	%	59.6		62.3						
	TOL	°C			-22						
	WTOL	°C			55						
G Condition (-15°CDB/-)	COPd		2.00		2.03						
	Pdh	kW	6.0		7.2						

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Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1				
Space heating 	Cold climate water outlet 55°C	G Condition (-15°CDB/-)	PERd	%	80.0			81.2					
		Tbiv (bivalent tempera- ture)	COPd Pdh PERd Tbiv			2.25 6.6 90.0 -12		2.03 7.2 81.2 -15					
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8				
Warm climate water outlet 55°C	General	Annual energy consumption	kWh				2,972						
				ηs (Seasonal space heating efficiency)	%			170					
				Prated at 2°C	kW				9.6				
				Qhe Annual energy consumption (GCV)	Gj				11				
				B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)	COPd	Pdh	PERd	%		1.0		
											2.66		
											8.0		
											106.5		
				C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)	COPd	Pdh	PERd	%		1.0		
											3.79		
											6.7		
											151.5		
				D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)	COPd	Pdh	PERd	%		1.0		
											5.87		
											3.6		
											234.9		
				Tbiv (bivalent tempera- ture)	COPd	Pdh	PERd	Tbiv	°C		3.13		
											8.4		
											125.4		
											4		
Average climate water outlet 35°C	General	Annual energy consumption	kWh		3,561			3,539					
				ηs (Seasonal space heating efficiency)	%	190			191				
				Prated at -10°C	kW				8.3				
				Qhe Annual energy consumption (GCV)	Gj				13				
				SCOP		4.81				4.84			
				Seasonal space heating eff. class					A+++				
				A Condition (-7°CDB- B/-8°CWB)	COPd	Pdh	PERd	%			3.20		
											7.5		
											128.0		
				B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)	COPd	Pdh	PERd	%		1.0		
4.93													

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Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1	
Space heating Average climate water outlet 35°C	B Condition (2°CDB/ B/1°CWB)	Pdh	kW						4.4	
		PERd	%						197.2	
	C Condition (7°CDB/ B/6°CWB)	Cdh (Degradation heating)								1.0
		COPd								6.37
		Pdh	kW							4.3
		PERd	%							254.8
	D Condition (12°CDB/ B/11°CWB)	Cdh (Degradation heating)								1.0
		COPd								8.13
		Pdh	kW							6.6
		PERd	%							325.2
	Tol (tem- perature operating limit)	COPd			2.90				2.86	
		Pdh		kW	6.9				8.1	
		PERd		%	116.0				114.4	
		TOL		°C					-10	
	Tbiv (bivalent tempera- ture)	COPd			3.20				2.86	
		Pdh		kW	7.5				8.1	
		PERd		%	128.0				114.4	
		Tbiv		°C	-7				-10	
	Rated heat output sup- plementary capacity	Psup (at Tdesign -10°C)		kW	1.4				0.0	
		Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,394		5,239		5,224
ηs (Seasonal space heating efficiency)				%	162		166		167	
Prated at -22°C				kW			9			
Qhe Annual energy consumption (GCV)	Gj			19.4		18.9		18.8		
A Condition (-7°CDB/ B/-8°CWB)	COPd							3.48		
	Pdh		kW					5.4		
	PERd		%					139.2		
B Condition (2°CDB/ B/1°CWB)	Cdh (Degradation heating)							1.0		
	COPd							5.40		
	Pdh		kW					3.6		
C Condition (7°CDB/ B/6°CWB)	PERd		%					216.0		
	Cdh (Degradation heating)							1.0		
	COPd							6.53		
D Condition (12°CDB/ B/11°CWB)	Pdh		kW					5.3		
	PERd		%					261.2		
	Cdh (Degradation heating)							1.0		
COPd							7.98			

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Technical specifications				ELSHB12P30E + ERRA08EW1	ELSHB12P50E + ERRA08EW1	ELSHB12P30E + ERRA10EW1	ELSHB12P50E + ERRA10EW1	ELSHB12P30E + ERRA12EW1	ELSHB12P50E + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	D Condition (12°CDB- B/11°CWB)	Pdh	kW	6.6					
			PERd	%	319.0		319.2			
		Tol (tem- perature operating limit)	COPd		2.11		2.14		2.16	
			Pdh	kW	4.9		5.9		6.5	
			PERd	%	84.3		85.6		86.4	
			TOL	°C			-22			
		G Condition (-15°CDB/-)	WTOL	°C			35			
			COPd		2.68				2.64	
		Tbiv (bivalent tempera- ture)	Pdh	kW	6.0				7.0	
			PERd	%	107.1				105.6	
	Tbiv		°C	2.95				2.64		
	Warm climate water outlet 35°C	General	Pdh	kW	6.5				7.0	
			PERd	%	118.1				105.6	
			Tbiv	°C	-12				-15	
			Psup (at Tdesign -22°C)	kW	4.1		3.1		2.6	
		Annual energy consumption	ηs (Seasonal space heating efficiency)	%			1,993			
			Prated at 2°C	kW			228			
			Qhe Annual energy consumption (GCV)	Gj			8.6		7	
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)				1.0			
			COPd				4.17			
Pdh			kW			6.8				
PERd	%				166.8					
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)				1.0					
	COPd				5.85					
	Pdh	kW			5.5					
	PERd	%			234.0					
Tbiv (bivalent tempera- ture)	COPd				4.89					
	Pdh	kW			6.8					
	PERd	%			195.6					
	Tbiv	°C			5					
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)				1.0					
	COPd				7.78					
	Pdh	kW			6.1					
		PERd	%			311.2				

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)	
Cooling capacity	Nom.		kW	6.81 (3) / 6.47 (4)		7.97 (3) / 6.47 (4)		8.62 (3) / 6.47 (4)	
Power input	Heating	Min.	kW	0.70 (5)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (5)		1.98 (5)		2.21 (5)	
	Cooling	Nom.	kW	2.08 (3) / 1.13 (4)		2.57 (3) / 1.13 (4)		2.86 (3) / 1.13 (4)	
	Domestic hot water from 10°C to 50°C	Nom.	kWh	3.44 (6)	4.65 (6)	3.44 (6)	4.65 (6)	3.44 (6)	4.65 (6)
Heat up time from 10°C to 50°C			hr	2h29min	3h45min	2h29min	3h45min	2h29min	3h45min
COP				5.10 (2)					
EER				3.28 (3) / 5.75 (4)		3.10 (4) / 5.75		3.01 (3) / 5.75 (4)	
Pump	Type			Grundfos UPM4L K 20-75 CHBL 3 RT					
	Nominal ESP Heating unit		kPa	55.4 (7)					
Water side Heat exchanger	Water flow rate	Heating	Nom.						18.3

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Technical specifications			ELSXB12P30E + ERRA08EW1	ELSXB12P50E + ERRA08EW1	ELSXB12P30E + ERRA10EW1	ELSXB12P50E + ERRA10EW1	ELSXB12P30E + ERRA12EW1	ELSXB12P50E + ERRA12EW1			
General	Supplier/ Manufacturer details	Name and address Name or trademark	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Daikin Europe N.V.								
	Product description	Air-to-water heat pump					Yes				
		Brine-to-water heat pump					No				
		Heat pump combination heater					Yes				
		Low-temperature heat pump					No				
		Supplementary heater integrated					No				
		Water-to-water heat pump					No				
	LW(A) Sound power level (according to EN14825)	Indoor	dB(A)				44.7				
	LW(A) Sound power level (according to EN14825)	Outdoor	dB(A)				56.0				
	Sound condition Ecodesign and energy label			Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h		3,542						
	Other	Capacity control	Inverter								
		Pck (Crankcase heater mode)	kW	0.000							
		Poff (Off mode)	kW	0.027							
		Psb (Standby mode)	kW	0.027							
Pto (Thermostat off)	kW	0.024									
Domestic hot water heating	General	Declared load profile	L	XL	L	XL	L	XL			
	Average climate	AEC (Annual electricity consumption)	kWh	858	1,235	858	1,235	858	1,235		
		COPdhw		2.83	3.29	2.83	3.29	2.83	3.29		
		Heat up time		2h 29min	3h 28min	2h 29min	3h 28min	2h 29min	3h 28min		
Domestic hot water heating	Average climate	η _{wh} (water heating efficiency)	%	119	136	119	136	119	136		
		Qelec (Daily electricity consumption)	kWh	4.120	5.800	4.120	5.800	4.120	5.800		
		Reference hot water temperature	°C	47.2	44.7	47.2	44.7	47.2	44.7		
		Stand-by power input	W	37.4	32.5	37.4	32.5	37.4	32.5		
		Water heating energy efficiency class		A+							
	Cold climate	AEC (Annual electricity consumption)	kWh	1,152	1,457	1,152	1,457	1,152	1,457		
		COPdhw		2.12	2.80	2.12	2.80	2.12	2.80		
		Heat up time		2h 23min	3h 37 min	2h 23min	3h 37 min	2h 23min	3h 37 min		
		η _{wh} (water heating efficiency)	%	89	115	89	115	89	115		
		Qelec (Daily electricity consumption)	kWh	5.500	6.820	5.500	6.820	5.500	6.820		
Warm climate	Reference hot water temperature	°C	46.3	44.7	46.3	44.7	46.3	44.7			
	Stand-by power input	W	45.5	34.3	45.5	34.3	45.5	34.3			
	AEC (Annual electricity consumption)	kWh	759	1,021	759	1,021	759	1,021			
	COPdhw		3.19	3.96	3.19	3.96	3.19	3.96			
	Heat up time		2h 18min	3h 17min	2h 18min	3h 17min	2h 18min	3h 17min			
Space heating	Average climate water outlet 55°C	η _{wh} (water heating efficiency)	%	135	164	135	164	135	164		
		Qelec (Daily electricity consumption)	kWh	3.650	4.820	3.650	4.820	3.650	4.820		
		Reference hot water temperature	°C	47.2	44.7	47.2	44.7	47.2	44.7		
		Stand-by power input	W	35.2	30.7	35.2	30.7	35.2	30.7		
		General	Annual energy consumption	kWh	7,442		7,423		7,210		
Space heating	Average climate water outlet 55°C	η _s (Seasonal space heating efficiency)	%	136				140			
		Prated at -10°C	kW	12.5							
		Qhe Annual energy consumption (GCV)	Gj	27				26			
		SCOP		3.47		3.48		3.58			
		Seasonal space heating eff. class		A++							
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)		1.0						
			COPd		2.34						
			Pdh	kW	7.6						
		B Condition (2°CDB/1°CWB)	PERd	%	93.6						
			Cdh (Degradation heating)		1.0						
			COPd		3.50						
		C Condition (7°CDB/6°CWB)	Pdh	kW	6.8						
			PERd	%	140.0						
			Cdh (Degradation heating)		1.0						
		C Condition (7°CDB/6°CWB)	COPd		5.07						
Pdh	kW		4.5								
PERd	%		202.8								

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Technical specifications				ELSXB12P30E + ERRA08EW1	ELSXB12P50E + ERRA08EW1	ELSXB12P30E + ERRA10EW1	ELSXB12P50E + ERRA10EW1	ELSXB12P30E + ERRA12EW1	ELSXB12P50E + ERRA12EW1
Space heating 	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	1.0					
			COPd	6.23					
		PdH kW	5.2						
			PERd %	249.2					
		Tol (temperature operating limit)	COPd	2.04			2.06		
			PdH kW	6.9			8.2		
		TOL °C	PERd %	81.6			82.4		
			WTOL °C	-10					
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C) kW	5.6			4.3		
			Tbiv (bivalent temperature)	COPd	2.90			2.48	
	PdH kW	8.5			10.0				
	PERd %	116.0			99.2				
	Tbiv °C	-2			-5				
	Cold climate water outlet 55°C	General	Annual energy consumption kWh	7,028		6,890		6,861	
			ηs (Seasonal space heating efficiency) %	123			126		
			Prated at -22°C kW	9.0					
			Qhe Annual energy consumption (GCV) GJ	25					
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)	1.0					
			COPd	2.61					
			PdH kW	5.2					
B Condition (2°CDB/1°CWB)		PERd %	104.2			104.4			
		Cdh (Degradation heating)	1.0						
		COPd	3.90						
C Condition (7°CDB/6°CWB)	PdH kW	3.3							
	PERd %	156.0							
	Cdh (Degradation heating)	1.0							
D Condition (12°CDB/11°CWB)	COPd	4.96							
	PdH kW	3.4							
	PERd %	198.3							
Tol (temperature operating limit)	COPd	6.56							
	PdH kW	4.2							
	PERd %	262.5							
Tol (temperature operating limit)	COPd	1.49		1.56		1.62			
	PdH kW	4.9		6.1		7.2			
	PERd %	59.6		62.3		64.7			
	TOL °C	-22							

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Technical specifications				ELSXB12P30E + ERRA08EW1	ELSXB12P50E + ERRA08EW1	ELSXB12P30E + ERRA10EW1	ELSXB12P50E + ERRA10EW1	ELSXB12P30E + ERRA12EW1	ELSXB12P50E + ERRA12EW1		
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	WTOL °C	55							
		G Condition (-15°CDB/-)	COPd		2.00		2.03				
			Pdh	kW	6.0		7.2				
			PERd	%	80.0		81.2				
		Tbiv (bivalent tempera- ture)	COPd		2.25		2.03				
			Pdh	kW	6.6		7.2				
			PERd	%	90.0		81.2				
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8		
		Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,853					
ηs (Seasonal space heating efficiency)	%			177							
Prated at 2°C	kW			9.6							
Qhe Annual energy consumption (GCV)	Gj			10							
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0							
	COPd			2.66							
	Pdh		kW	8.0							
	PERd		%	106.5							
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0							
	COPd			3.79							
	Pdh		kW	6.7							
	PERd		%	151.5							
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0							
	COPd			5.87							
	Pdh		kW	3.6							
	PERd		%	234.9							
Tbiv (bivalent tempera- ture)	COPd			3.13							
	Pdh		kW	8.4							
	PERd	%	125.4								
	Tbiv	°C	4								
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,462		3,440					
		ηs (Seasonal space heating efficiency)	%	195		196					
		Prated at -10°C	kW	8.3							
		Qhe Annual energy consumption (GCV)	Gj	12							
		SCOP		4.95		4.98					
	Seasonal space heating eff. class			A+++							
	A Condition (-7°CDB/-8°CWB)	COPd		3.20							
Pdh		kW	7.5								

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Technical specifications				ELSB12P30E + ERRA08EW1	ELSB12P50E + ERRA08EW1	ELSB12P30E + ERRA10EW1	ELSB12P50E + ERRA10EW1	ELSB12P30E + ERRA12EW1	ELSB12P50E + ERRA12EW1	
Space heating 	Average climate water outlet 35°C	A Condition (-7°C-D B/-8°CWB)	PERd	%	128.0					
		B Condition (2°C-D B/1°CWB)	Cdh (Degradation heating)			1.0				
	COPd				4.93					
	Pdh			kW	4.4					
	PERd			%	197.2					
	C Condition (7°C-D B/6°CWB)	Cdh (Degradation heating)			1.0					
		COPd			6.37					
		Pdh		kW	4.3					
		PERd		%	254.8					
	D Condition (12°C-D B/11°CWB)	Cdh (Degradation heating)			1.0					
		COPd			8.13					
		Pdh		kW	6.6					
		PERd		%	325.2					
	Tol (temperature operating limit)	COPd			2.90				2.86	
		Pdh		kW	6.9				8.1	
		PERd		%	116.0				114.4	
		TOL		°C				-10		
	Tbiv (bivalent temperature)	WTOL		°C				35		
		COPd			3.20				2.86	
		Pdh		kW	7.5				8.1	
		PERd		%	128.0				114.4	
	Rated heat output supplementary capacity	Tbiv		°C	-7				-10	
		Psup (at Tdesign -10°C)		kW	1.4				0.0	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334			5,180		5,165
			ηs (Seasonal space heating efficiency)	%	163			168		169
			Prated at -22°C	kW				9		
			Qhe Annual energy consumption (GCV)	Gj	19.2				18.6	
		A Condition (-7°C-D B/-8°CWB)	COPd						3.48	
	B Condition (2°C-D B/1°CWB)	Pdh		kW				5.4		
		PERd		%				139.2		
		Cdh (Degradation heating)						1.0		
	C Condition (7°C-D B/6°CWB)	COPd						5.40		
		Pdh		kW				3.6		
PERd			%				216.0			
D Condition (12°C-D B/11°CWB)	Cdh (Degradation heating)						1.0			
	COPd						6.53			
	Pdh		kW				5.3			

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Technical specifications				ELSX12P30E + ERRA08EW1	ELSX12P50E + ERRA08EW1	ELSX12P30E + ERRA10EW1	ELSX12P50E + ERRA10EW1	ELSX12P30E + ERRA12EW1	ELSX12P50E + ERRA12EW1		
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB/ B/6°CWB)	PERd	%	261.2						
			D Condition (12°CDB/ B/11°CWB)		Cdh (Degradation heating)	1.0					
				COPd	7.98						
				Pdh	6.6						
				PERd	319.0						
		Tol (tem- perature operating limit)		COPd	2.11		2.14		319.2		2.16
				Pdh	4.9		5.9				6.5
				PERd	84.3		85.6				86.4
				TOL	-22						
				WTOL	35						
	G Condition (-15°CDB/-)		COPd	2.68				2.64			
			Pdh	6.0				7.0			
			PERd	107.1				105.6			
	Tbiv (bivalent tempera- ture)		COPd	2.95				2.64			
			Pdh	6.5				7.0			
			PERd	118.1				105.6			
			Tbiv	-12				-15			
	Rated heat output sup- plementary capacity		Psup (at Tdesign -22°C)	4.1		3.1				2.6	
	Warm climate water outlet 35°C	General	Annual energy consumption		1,873						
			ηs (Seasonal space heating efficiency)		242						
Prated at 2°C			8.6								
Qhe Annual energy consumption (GCV)			7								
B Condition (2°CDB/ B/1°CWB)		Cdh (Degradation heating)		1.0							
		COPd		4.17							
		Pdh		6.8							
		PERd		166.8							
C Condition (7°CDB/ B/6°CWB)		Cdh (Degradation heating)		1.0							
		COPd		5.85							
		Pdh		5.5							
		PERd		234.0							
Tbiv (bivalent tempera- ture)		COPd		4.89							
		Pdh		6.8							
		PERd		195.6							
	Tbiv		5								
D Condition (12°CDB/ B/11°CWB)	Cdh (Degradation heating)		1.0								
	COPd		7.78								
	Pdh		6.1								
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB/ B/11°CWB)	PERd	%	311.2						

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
 (2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |
 (3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
 (4)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
 (5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
 (6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
 (7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1
Heating capacity	Min.	kW		3.45 (1)					
	Nom.	kW		6.17 (2)					
	Max.	kW		7.95 (1)		9.25 (1)		9.97 (1)	
Power input	Heating	Min.	kW		0.70 (3)				
		Nom.	kW		1.21 (2)				
		Max.	kW		1.63 (3)		1.98 (3)		2.21 (3)
	Domestic hot water from 10°C to 50°C	Nom.	kWh		2.54 (4)		3.09 (4)		2.54 (4) 3.09 (4)
Heat up time from 10°C to 50°C			hr	1h 51min		2h 10min		1h 51min 2h 10min	
COP			5.10 (2)						

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Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1		
Pump	Type	Grundfos UPM4L K 15-75 130 9 DKI									
	Nominal ESP Heating unit	kPa	67.1 (5)								
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3							
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
		Name or trademark		Daikin Europe N.V.							
	Product description	Air-to-water heat pump			Yes						
		Brine-to-water heat pump			No						
		Heat pump combination heater			Yes						
		Low-temperature heat pump			No						
		Supplementary heater integrated			Yes						
		Water-to-water heat pump			No						
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)	44.0								
LW(A) Sound power level (according to EN14825)	Outdoor	dB(A)	56.0								
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L		
		Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542					
			Other	Capacity control		Inverter					
				Pck (Crankcase heater mode)	kW	0.000					
				Poff (Off mode)	kW	0.027					
				Psb (Standby mode)	kW	0.027					
		Pto (Thermostat off)	kW	0.024							
Domestic hot water heating	General	Declared load profile		L							
Space heating general	Integrated supplementary heater	Psup	kW	6.0							
		Type of energy input		Electrical							
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	851	787	851	787	851	787		
		COPdhw		2.80	3.05	2.80	3.05	2.80	3.05		
		Heat up time		1h 57min	2h 14min	1h 57min	2h 14min	1h 57min	2h 14min		
Domestic hot water heating	Average climate	η _{wh} (water heating efficiency)	%	120	130	120	130	120	130		
		Qelec (Daily electricity consumption)	kWh	4.160	3.830	4.160	3.830	4.160	3.830		
		Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0		
		Stand-by power input	W	50.7	43.9	50.7	43.9	50.7	43.9		
		Water heating energy efficiency class		A+							
	Cold climate	AEC (Annual electricity consumption)	kWh	937	866	937	866	937	866		
		COPdhw		2.55	2.77	2.55	2.77	2.55	2.77		
		Heat up time		1h 55min	2h 02min	1h 55min	2h 02min	1h 55min	2h 02min		
		η _{wh} (water heating efficiency)	%	109	118	109	118	109	118		
		Qelec (Daily electricity consumption)	kWh	4.570	4.200	4.570	4.200	4.570	4.200		
Warm climate	Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0			
	Stand-by power input	W	54.3	46.7	54.3	46.7	54.3	46.7			
	AEC (Annual electricity consumption)	kWh	699	648	699	648	699	648			
	COPdhw		3.40	3.68	3.40	3.68	3.40	3.68			
	Heat up time		1h 54min	2h 06min	1h 54min	2h 06min	1h 54min	2h 06min			
	η _{wh} (water heating efficiency)	%	147	158	147	158	147	158			
	Qelec (Daily electricity consumption)	kWh	3.430	3.160	3.430	3.160	3.430	3.160			
	Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0			
	Stand-by power input	W	44.6	39.0	44.6	39.0	44.6	39.0			

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Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1			
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309			
			ηs (Seasonal space heating efficiency)	%		134		138				
			Prated at -10°C	kW			12.5					
			Qhe Annual energy consumption (GCV)	Gj		27		26				
			SCOP		3.42		3.43		3.53			
			Seasonal space heating eff. class				A++					
			A Condition (-7°CDB/8°CWB)	Cdh (Degradation heating)			1.0					
				COPd			2.34					
				Pdh	kW		7.6					
				PERd	%		93.6					
			B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0					
				COPd			3.50					
				Pdh	kW		6.8					
				PERd	%		140.0					
			C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0					
				COPd			5.07					
				Pdh	kW		4.5					
				PERd	%		202.8					
			Space heating	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0			
						COPd			6.23			
Pdh	kW					5.2						
PERd	%					249.2						
Tol (temperature operating limit)	COPd					2.04		2.06				
	Pdh	kW				6.9		8.2				
	PERd	%				81.6		82.4				
	TOL	°C						-10				
	WTOL	°C						55				
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW				5.6		4.3				
	Tbiv (bivalent temperature)	COPd					2.90		2.48			
		Pdh				kW	8.5		10.0			
		PERd				%	116.0		99.2			
		Tbiv				°C	-2		-5			
Cold climate water outlet 55°C	General	Annual energy consumption				kWh	7,088		6,950		6,921	
		ηs (Seasonal space heating efficiency)				%	122		125			
		Prated at -22°C				kW			9.0			
		Qhe Annual energy consumption (GCV)				Gj	26		25			
		A Condition (-7°CDB/8°CWB)				Cdh (Degradation heating)			1.0			
						COPd			2.61			
			Pdh	kW		5.2						
			PERd	%	104.2		104.4					
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0						
			COPd			3.90						
			Pdh	kW		3.3						
			PERd	%		156.0						
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0						
			COPd			4.96						
			Pdh	kW		3.4						
			PERd	%		198.3						
		D Condition (12°CDB/11°CWB)	COPd			6.56						
			Pdh	kW		4.2						
			PERd	%		262.5						
		Tol (temperature operating limit)	COPd		1.49		1.56		1.62			
Pdh	kW		4.9		6.1		7.2					
PERd	%		59.6		62.3		64.7					
TOL	°C				-22							

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Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1		
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	WTOL °C	55							
		G Condition (-15°CDB/-)	COPd		2.00		2.03				
			Pdh	kW	6.0		7.2				
			PERd	%	80.0		81.2				
		Tbiv (bivalent tempera- ture)	COPd		2.25		2.03				
			Pdh	kW	6.6		7.2				
			PERd	%	90.0		81.2				
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8		
		Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,972					
ηs (Seasonal space heating efficiency)	%			170							
Prated at 2°C	kW			9.6							
Qhe Annual energy consumption (GCV)	Gj			11							
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0							
	COPd			2.66							
	Pdh		kW	8.0							
	PERd		%	106.5							
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0							
	COPd			3.79							
	Pdh		kW	6.7							
	PERd		%	151.5							
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0							
	COPd			5.87							
	Pdh		kW	3.6							
	PERd		%	234.9							
Tbiv (bivalent tempera- ture)	COPd			3.13							
	Pdh		kW	8.4							
	PERd		%	125.4							
	Tbiv	°C	4								
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,561		3,539					
		ηs (Seasonal space heating efficiency)	%	190		191					
		Prated at -10°C	kW	8.3							
		Qhe Annual energy consumption (GCV)	Gj	13							
		SCOP		4.81		4.84					
	Seasonal space heating eff. class			A+++							
	A Condition (-7°CDB/-8°CWB)	COPd		3.20							
Pdh		kW	7.5								

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Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1	
Space heating Average climate water outlet 35°C	A Condition (-7°C- B/-8°CWB)	PERd	%	128.0						
	B Condition (2°C- B/1°CWB)	Cdh (Degradation heating)		1.0						
		COPd		4.93						
		Pdh	kW	4.4						
		PERd	%	197.2						
	C Condition (7°C- B/6°CWB)	Cdh (Degradation heating)		1.0						
		COPd		6.37						
		Pdh	kW	4.3						
		PERd	%	254.8						
	D Condition (12°C- B/11°CWB)	Cdh (Degradation heating)		1.0						
		COPd		8.13						
		Pdh	kW	6.6						
		PERd	%	325.2						
	Tol (tem- perature operating limit)	COPd		2.90					2.86	
		Pdh	kW	6.9					8.1	
		PERd	%	116.0					114.4	
		TOL	°C						-10	
	Tbiv (bivalent tempera- ture)	WTOL	°C						35	
		COPd		3.20					2.86	
		Pdh	kW	7.5					8.1	
		PERd	%	128.0					114.4	
	Rated heat output sup- plementary capacity	Tbiv	°C	-7					-10	
		Psup (at Tdesign -10°C)	kW	1.4					0.0	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,394			5,239		5,224
ηs (Seasonal space heating efficiency)			%	162			166		167	
Prated at -22°C			kW				9			
Qhe Annual energy consumption (GCV)			Gj	19.4			18.9		18.8	
A Condition (-7°C- B/-8°CWB)		COPd						3.48		
		Pdh	kW					5.4		
		PERd	%					139.2		
B Condition (2°C- B/1°CWB)		Cdh (Degradation heating)						1.0		
		COPd						5.40		
		Pdh	kW					3.6		
C Condition (7°C- B/6°CWB)	PERd	%					216.0			
	Cdh (Degradation heating)						1.0			
	COPd						6.53			
	Pdh	kW					5.3			

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Technical specifications				ELVH12S18E6V + ERRA08EW1	ELVH12S23E6V + ERRA08EW1	ELVH12S18E6V + ERRA10EW1	ELVH12S23E6V + ERRA10EW1	ELVH12S18E6V + ERRA12EW1	ELVH12S23E6V + ERRA12EW1		
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB/ B/6°CWB)	PERd	%	261.2						
			D Condition (12°CDB/ B/11°CWB)	Cdh (Degradation heating)		1.0					
			COPd		7.98						
			Pdh	kW	6.6						
			PERd	%	319.0		319.2				
		Tol (tem- perature operating limit)		COPd		2.11		2.14		2.16	
				Pdh	kW	4.9		5.9		6.5	
				PERd	%	84.3		85.6		86.4	
				TOL	°C	-22					
			WTOL	°C	35						
	G Condition (-15°CDB/-)		COPd		2.68		2.64				
			Pdh	kW	6.0		7.0				
			PERd	%	107.1		105.6				
	Tbiv (bivalent tempera- ture)		COPd		2.95		2.64				
			Pdh	kW	6.5		7.0				
			PERd	%	118.1		105.6				
		Tbiv	°C	-12		-15					
	Rated heat output sup- plementary capacity		Psup (at Tdesign -22°C)	kW	4.1		3.1		2.6		
	Warm climate water outlet 35°C	General		Annual energy consumption	kWh	1,993					
				ηs (Seasonal space heating efficiency)	%	228					
				Prated at 2°C	kW	8.6					
				Qhe Annual energy consumption (GCV)	Gj	7					
		B Condition (2°CDB/ B/1°CWB)		Cdh (Degradation heating)		1.0					
				COPd		4.17					
				Pdh	kW	6.8					
				PERd	%	166.8					
		C Condition (7°CDB/ B/6°CWB)		Cdh (Degradation heating)		1.0					
			COPd		5.85						
	Pdh		kW	5.5							
	PERd		%	234.0							
Tbiv (bivalent tempera- ture)		COPd		4.89							
		Pdh	kW	6.8							
		PERd	%	195.6							
		Tbiv	°C	5							
D Condition (12°CDB/ B/11°CWB)		Cdh (Degradation heating)		1.0							
		COPd		7.78							
		Pdh	kW	6.1							
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB/ B/11°CWB)	PERd	%	311.2						

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)	
Power input	Heating	Min.	kW	0.70 (3)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (3)		1.98 (3)		2.21 (3)	
	Domestic hot water from 10°C to 50°C	Nom.	kWh	2.54 (4)		3.09 (4)		2.54 (4)	
Heat up time from 10°C to 50°C			hr	1h 51min	2h 10min	1h 51min	2h 10min	1h 51min	2h 10min
COP				5.10 (2)					

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Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1		
Pump	Type	Grundfos UPM4L K 15-75 130 9 DK1									
	Nominal ESP Heating unit	kPa	67.1 (5)								
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3							
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
		Name or trademark		Daikin Europe N.V.							
	Product description	Air-to-water heat pump			Yes						
		Brine-to-water heat pump			No						
		Heat pump combination heater			Yes						
		Low-temperature heat pump			No						
		Supplementary heater integrated			Yes						
	LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.0						
Outdoor			dB(A)	56.0							
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L		
		Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542					
		Other	Capacity control			Inverter					
			Pck (Crankcase heater mode)		kW	0.000					
			Poff (Off mode)		kW	0.027					
			Psb (Standby mode)		kW	0.027					
Pto (Thermostat off)		kW	0.024								
Domestic hot water heating	General	Declared load profile		L							
Space heating general	Integrated supplementary heater	Psup	kW	9.0							
		Type of energy input		Electrical							
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	851	787	851	787	851	787		
		COPdhw		2.80	3.05	2.80	3.05	2.80	3.05		
		Heat up time		1h 57min	2h 14min	1h 57min	2h 14min	1h 57min	2h 14min		
Domestic hot water heating	Average climate	ηwh (water heating efficiency)	%	120	130	120	130	120	130		
		Qelec (Daily electricity consumption)	kWh	4.160	3.830	4.160	3.830	4.160	3.830		
		Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0		
Domestic hot water heating	Cold climate	Stand-by power input	W	50.7	43.9	50.7	43.9	50.7	43.9		
		Water heating energy efficiency class		A+							
	Warm climate	AEC (Annual electricity consumption)	kWh	937	866	937	866	937	866		
		COPdhw		2.55	2.77	2.55	2.77	2.55	2.77		
		Heat up time		1h 55min	2h 02min	1h 55min	2h 02min	1h 55min	2h 02min		
		ηwh (water heating efficiency)	%	109	118	109	118	109	118		
		Qelec (Daily electricity consumption)	kWh	4.570	4.200	4.570	4.200	4.570	4.200		
		Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0		
		Stand-by power input	W	54.3	46.7	54.3	46.7	54.3	46.7		
		AEC (Annual electricity consumption)	kWh	699	648	699	648	699	648		
COPdhw		3.40	3.68	3.40	3.68	3.40	3.68				
Warm climate	Heat up time		1h 54min	2h 06min	1h 54min	2h 06min	1h 54min	2h 06min			
	ηwh (water heating efficiency)	%	147	158	147	158	147	158			
	Qelec (Daily electricity consumption)	kWh	3.430	3.160	3.430	3.160	3.430	3.160			
	Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0			
	Stand-by power input	W	44.6	39.0	44.6	39.0	44.6	39.0			

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Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1		
Space heating 	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309		
			ηs (Seasonal space heating efficiency)	%		134			138		
			Prated at -10°C	kW			12.5				
			Qhe Annual energy consumption (GCV)	Gj		27			26		
			SCOP		3.42		3.43		3.53		
			Seasonal space heating eff. class				A++				
			A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0				
				COPd			2.34				
				Pdh	kW		7.6				
				PERd	%		93.6				
			B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0				
				COPd			3.50				
				Pdh	kW		6.8				
				PERd	%		140.0				
			C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0				
				COPd			5.07				
				Pdh	kW		4.5				
				PERd	%		202.8				
			Space heating 	Average climate water outlet 55°C	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0		
						COPd			6.23		
Pdh	kW						5.2				
PERd	%						249.2				
Tol (temperature operating limit)	COPd					2.04			2.06		
	Pdh	kW				6.9			8.2		
	PERd	%				81.6			82.4		
	TOL	°C							-10		
	WTOL	°C							55		
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW				5.6			4.3		
	Tbiv (bivalent temperature)	COPd					2.90		2.48		
		Pdh				kW		8.5		10.0	
		PERd				%		116.0		99.2	
Tbiv		°C					-2		-5		
Cold climate water outlet 55°C	General	Annual energy consumption				kWh	7,088		6,950		6,921
		ηs (Seasonal space heating efficiency)				%	122			125	
		Prated at -22°C				kW			9.0		
		Qhe Annual energy consumption (GCV)				Gj	26			25	
		A Condition (-7°CDB/-8°CWB)				Cdh (Degradation heating)			1.0		
						COPd			2.61		
			Pdh	kW		5.2					
			PERd	%	104.2			104.4			
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0					
			COPd			3.90					
			Pdh	kW		3.3					
			PERd	%		156.0					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0					
			COPd			4.96					
			Pdh	kW		3.4					
			PERd	%		198.3					
		D Condition (12°CDB/11°CWB)	COPd			6.56					
			Pdh	kW		4.2					
			PERd	%		262.5					
		Tol (temperature operating limit)	COPd		1.49			1.62			
Pdh	kW		4.9			7.2					
PERd	%		59.6			64.7					
TOL	°C					-22					

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Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	WTOL °C	55					
		G Condition (-15°CDB/-)	COPd	2.00					2.03
			Pdh kW	6.0					7.2
			PERd %	80.0					81.2
		Tbiv (bivalent tempera- ture)	COPd	2.25					2.03
			Pdh kW	6.6					7.2
			PERd %	90.0					81.2
		Rated heat output sup- plementary capacity	Tbiv °C	-12					-15
			Psup (at Tdesign -22°C) kW	4.1			2.9		
		Warm climate water outlet 55°C	General	Annual energy consumption	kWh	2,972			
ηs (Seasonal space heating efficiency)	%			170					
Prated at 2°C	kW			9.6					
Qhe Annual energy consumption (GCV)	Gj			11					
B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0					
	COPd			2.66					
	Pdh kW			8.0					
	PERd %			106.5					
C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0					
	COPd			3.79					
	Pdh kW			6.7					
	PERd %			151.5					
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0					
	COPd			5.87					
	Pdh kW			3.6					
	PERd %			234.9					
Tbiv (bivalent tempera- ture)	COPd		3.13						
	Pdh kW		8.4						
	PERd %		125.4						
	Tbiv °C		4						
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,561					3,539
		ηs (Seasonal space heating efficiency)	%	190					191
		Prated at -10°C	kW	8.3					
		Qhe Annual energy consumption (GCV)	Gj	13					
		SCOP		4.81					4.84
		Seasonal space heating eff. class		A+++					
A Condition (-7°CDB/-8°CWB)	COPd		3.20						
	Pdh kW		7.5						

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Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1	
Space heating Average climate water outlet 35°C	A Condition (-7°C-D/B/-8°CWB)	PERd	%	128.0						
	B Condition (2°C-D/B/1°CWB)	Cdh (Degradation heating)			1.0					
		COPd			4.93					
		Pdh	kW		4.4					
		PERd	%		197.2					
	C Condition (7°C-D/B/6°CWB)	Cdh (Degradation heating)			1.0					
		COPd			6.37					
		Pdh	kW		4.3					
		PERd	%		254.8					
	D Condition (12°C-D/B/11°CWB)	Cdh (Degradation heating)			1.0					
		COPd			8.13					
		Pdh	kW		6.6					
		PERd	%		325.2					
	Tol (temperature operating limit)	COPd			2.90				2.86	
		Pdh	kW		6.9				8.1	
		PERd	%		116.0				114.4	
		TOL	°C		-10					
	Tbiv (bivalent temperature)	WTOL	°C		35					
		COPd			3.20				2.86	
		Pdh	kW		7.5				8.1	
		PERd	%		128.0				114.4	
	Rated heat output supplementary capacity	Tbiv	°C		-7				-10	
		Psup (at Tdesign -10°C)	kW		1.4				0.0	
	Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,394			5,239		5,224
			ηs (Seasonal space heating efficiency)	%	162			166		167
			Prated at -22°C	kW				9		
			Qhe Annual energy consumption (GCV)	Gj	19.4			18.9		18.8
A Condition (-7°C-D/B/-8°CWB)		COPd			3.48					
		Pdh	kW		5.4					
		PERd	%		139.2					
B Condition (2°C-D/B/1°CWB)		Cdh (Degradation heating)			1.0					
		COPd			5.40					
		Pdh	kW		3.6					
C Condition (7°C-D/B/6°CWB)	PERd	%		216.0						
	Cdh (Degradation heating)			1.0						
	COPd			6.53						
Pdh	kW		5.3							

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Technical specifications				ELVH12S18E9W + ERRA08EW1	ELVH12S23E9W + ERRA08EW1	ELVH12S18E9W + ERRA10EW1	ELVH12S23E9W + ERRA10EW1	ELVH12S18E9W + ERRA12EW1	ELVH12S23E9W + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/6°CWB)	PERd	%	261.2					
			D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)		1.0				
			COPd		7.98					
			Pdh	kW	6.6					
			PERd	%	319.0		319.2			
		Tol (tem- perature operating limit)	COPd		2.11		2.14		2.16	
				Pdh	kW	4.9		5.9		6.5
			PERd	%	84.3		85.6		86.4	
			TOL	°C	-22					
		G Condition (-15°CDB/-)	COPd		2.68		2.64			
	Pdh		kW	6.0		7.0				
	Tbiv (bivalent tempera- ture)	COPd		2.95		2.64				
			Pdh	kW	6.5		7.0			
	Rated heat output sup- plementary capacity	PERd		118.1		105.6				
			Tbiv	°C	-12		-15			
	Warm climate water outlet 35°C	General	Psup (at Tdesign -22°C)	kW	4.1		3.1		2.6	
			Annual energy consumption	kWh	1,993					
			ηs (Seasonal space heating efficiency)	%	228					
			Prated at 2°C	kW	8.6					
		B Condition (2°CDB- B/1°CWB)	Qhe Annual energy consumption (GCV)		7					
Cdh (Degradation heating)					1.0					
COPd				4.17						
Pdh			kW	6.8						
C Condition (7°CDB- B/6°CWB)		PERd		166.8						
			Cdh (Degradation heating)		1.0					
	COPd		5.85							
	Pdh	kW	5.5							
Tbiv (bivalent tempera- ture)	PERd		234.0							
		COPd		4.89						
	Pdh	kW	6.8							
	PERd	%	195.6							
D Condition (12°CDB- B/11°CWB)	Tbiv		5							
		Cdh (Degradation heating)		1.0						
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB- B/11°CWB)	PERd	%	311.2					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)		9.25 (1)		9.97 (1)	
Cooling capacity	Nom.		kW	6.81 (3) / 6.47 (4)		7.97 (3) / 6.47 (4)		8.62 (3) / 6.47 (4)	
Power input	Heating	Min.	kW	0.70 (5)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (5)		1.98 (5)		2.21 (5)	
	Cooling	Nom.	kW	2.08 (3) / 1.13 (4)		2.57 (3) / 1.13 (4)		2.86 (3) / 1.13 (4)	
		Domestic hot water from 10°C to 50°C	Nom.	kWh	2.54 (6)	3.09 (6)	2.54 (6)	3.09 (6)	2.54 (6)
Heat up time from 10°C to 50°C			hr	1h 51min	2h 10min	1h 51min	2h 10min	1h 51min	2h 10min
COP				5.10 (2)					

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Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1	
EER				3.28 (3) / 5.75 (4)		3.10 (4) / 5.75		3.01 (3) / 5.75 (4)		
Pump	Type				Grundfos UPM4L K 15-75 130 9 DK1					
	Nominal ESP unit	Heating	kPa	671 (7)						
Water side Heat exchanger	Water flow rate	Heating	Nom.	l/min			18.3			
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium						
	Product description	Name or trademark		Daikin Europe N.V.						
		Air-to-water heat pump		Yes						
		Brine-to-water heat pump		No						
		Heat pump combination heater		Yes						
		Low-temperature heat pump		No						
		Supplementary heater integrated		Yes						
LW(A) Sound power level (according to EN14825)	Indoor	dB(A)		44.0						
	Outdoor	dB(A)		56.0						
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825						
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	
	Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h			3,542			
Domestic hot water heating	General	Declared load profile		L						
		Capacity control		Inverter						
		Pck (Crankcase heater mode)		kW						0.000
		Poff (Off mode)		kW						0.027
		Psb (Standby mode)		kW						0.027
Space heating general	Integrated supplementary heater	Psup		kW						6.0
		Type of energy input		Electrical						
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)		kWh			851	787	851	787
		COPdhw					2.80	3.05	2.80	3.05
		Heat up time					1h 57min	2h 14min	1h 57min	2h 14min
		η _{wh} (water heating efficiency)		%			120	130	120	130
		Qelec (Daily electricity consumption)		kWh			4.160	3.830	4.160	3.830
	Cold climate	Reference hot water temperature		°C			53.0	52.0	53.0	52.0
		Stand-by power input		W			50.7	43.9	50.7	43.9
		Water heating energy efficiency class					A+			
		AEC (Annual electricity consumption)		kWh			937	866	937	866
		COPdhw					2.55	2.77	2.55	2.77
	Warm climate	Heat up time					1h 55min	2h 02min	1h 55min	2h 02min
		η _{wh} (water heating efficiency)		%			109	118	109	118
		Qelec (Daily electricity consumption)		kWh			4.570	4.200	4.570	4.200
		Reference hot water temperature		°C			53.0	52.0	53.0	52.0
		Stand-by power input		W			54.3	46.7	54.3	46.7
Warm climate	AEC (Annual electricity consumption)		kWh			699	648	699	648	
	COPdhw					3.40	3.68	3.40	3.68	
	Heat up time					1h 54min	2h 06min	1h 54min	2h 06min	
	η _{wh} (water heating efficiency)		%			147	158	147	158	
	Qelec (Daily electricity consumption)		kWh			3.430	3.160	3.430	3.160	
Reference hot water temperature		°C			53.0	52.0	53.0	52.0		
Stand-by power input		W			44.6	39.0	44.6	39.0		

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Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,442		7,423		7,210		
			ηs (Seasonal space heating efficiency)	%		136		140			
			Prated at -10°C	kW			12.5				
			Qhe Annual energy consumption (GCV)	Gj		27		26			
			SCOP		3.47		3.48		3.58		
			Seasonal space heating eff. class				A++				
			A Condition (-7°C-D/B/-8°CWB)	Cdh (Degradation heating)			1.0				
				COPd			2.34				
				Pdh	kW		7.6				
				PERd	%		93.6				
			B Condition (2°C-D/B/1°CWB)	Cdh (Degradation heating)			1.0				
				COPd			3.50				
				Pdh	kW		6.8				
				PERd	%		140.0				
			C Condition (7°C-D/B/6°CWB)	Cdh (Degradation heating)			1.0				
			Space heating	Average climate water outlet 55°C	C Condition (7°C-D/B/6°CWB)	COPd			5.07		
						Pdh	kW		4.5		
						PERd	%		202.8		
						D Condition (12°C-D/B/11°CWB)	Cdh (Degradation heating)			1.0	
	COPd						6.23				
	Pdh	kW					5.2				
	PERd	%					249.2				
Tol (temperature operating limit)	COPd					2.04		2.06			
	Pdh	kW				6.9		8.2			
	PERd	%				81.6		82.4			
	TOL	°C						-10			
	WTOL	°C						55			
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW				5.6		4.3			
Tbiv (bivalent temperature)	COPd					2.90		2.48			
	Pdh	kW				8.5		10.0			
	PERd	%				116.0		99.2			
	Tbiv	°C				-2		-5			
Cold climate water outlet 55°C	General	Annual energy consumption				kWh	7,028		6,890		6,861
		ηs (Seasonal space heating efficiency)				%	123		126		
		Prated at -22°C	kW			9.0					
		Qhe Annual energy consumption (GCV)	Gj			25					
		A Condition (-7°C-D/B/-8°CWB)	Cdh (Degradation heating)			1.0					
			COPd			2.61					
			Pdh	kW		5.2					
			PERd	%	104.2		104.4				
		B Condition (2°C-D/B/1°CWB)	Cdh (Degradation heating)			1.0					
			COPd			3.90					
			Pdh	kW		3.3					
			PERd	%		156.0					
		C Condition (7°C-D/B/6°CWB)	Cdh (Degradation heating)			1.0					
			COPd			4.96					
			Pdh	kW		3.4					
			PERd	%		198.3					
		D Condition (12°C-D/B/11°CWB)	COPd			6.56					
			Pdh	kW		4.2					
			PERd	%		262.5					
Tol (temperature operating limit)	COPd		1.49		1.56		1.62				

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Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1	
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	Pdh	kW	4.9		6.1		7.2	
			PERd	%	59.6		62.3		64.7	
		G Condition (-15°CDB/-)	WTOL	°C				-22		
			COPd			2.00			2.03	
		Tbiv (bivalent tempera- ture)	Pdh	kW	6.0			7.2		
			PERd	%	80.0			81.2		
		Rated heat output sup- plementary capacity	COPd		2.25			2.03		
			Pdh	kW	6.6			7.2		
		Warm climate water outlet 55°C	General	PERd	%	90.0		81.2		
				Tbiv	°C	-12		-15		
	Average climate water outlet 35°C	General	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8	
			Annual energy consumption	kWh			2,853			
			ηs (Seasonal space heating efficiency)	%			177			
			Prated at 2°C	kW			9.6			
			Qhe Annual energy consumption (GCV)	Gj			10			
			B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)			1.0			
			COPd				2.66			
			Pdh	kW			8.0			
			PERd	%			106.5			
			C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)			1.0			
		COPd				3.79				
		Pdh	kW			6.7				
		PERd	%			151.5				
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)			1.0				
		COPd				5.87				
		Pdh	kW			3.6				
		PERd	%			234.9				
		Tbiv (bivalent tempera- ture)	COPd			3.13				
		Pdh	kW			8.4				
		PERd	%			125.4				
		Tbiv	°C			4				
		Annual energy consumption	kWh	3,462			3,440			
		ηs (Seasonal space heating efficiency)	%	195			196			
		Prated at -10°C	kW			8.3				
		Qhe Annual energy consumption (GCV)	Gj			12				
		SCOP		4.95			4.98			

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Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1	
Space heating Average climate water outlet 35°C	General	Seasonal space heating eff. class		A+++						
		A Condition	COPd	3.20						
		(-7°CDB/-8°CWB)	Pdh	kW	7.5					
			PERd	%	128.0					
			B Condition	Cdh (Degradation heating)	1.0					
		(2°CDB/1°CWB)	COPd		4.93					
			Pdh	kW	4.4					
			PERd	%	197.2					
		C Condition	Cdh (Degradation heating)		1.0					
			(7°CDB/6°CWB)	COPd	6.37					
			Pdh	kW	4.3					
		D Condition	PERd	%	254.8					
			Cdh (Degradation heating)		1.0					
			(12°CDB/11°CWB)	COPd	8.13					
		Tol (temperature operating limit)	Pdh	kW	6.6					
			PERd	%	325.2					
			TOL	°C	-10					
		Tbiv (bivalent temperature)	WTOL	°C	35					
			COPd		2.90				2.86	
			Pdh	kW	6.9				8.1	
		Rated heat output supplementary capacity	PERd	%	116.0				114.4	
			Tbiv	°C						
			WTOL	°C						
		Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334			5,180	
ηs (Seasonal space heating efficiency)	%				163			168		169
Prated at -22°C	kW							9		
Qhe Annual energy consumption (GCV)	Gj				19.2				18.6	
A Condition	COPd				3.48					
(-7°CDB/-8°CWB)	Pdh		kW	5.4						
	PERd		%	139.2						
	B Condition		Cdh (Degradation heating)	1.0						
(2°CDB/1°CWB)	COPd			5.40						
	Pdh		kW	3.6						
	PERd	%	216.0							

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Technical specifications				ELVX12S18E6V + ERRA08EW1	ELVX12S23E6V + ERRA08EW1	ELVX12S18E6V + ERRA10EW1	ELVX12S23E6V + ERRA10EW1	ELVX12S18E6V + ERRA12EW1	ELVX12S23E6V + ERRA12EW1	
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)						1.0	
			COPd						6.53	
			Pdh kW						5.3	
			PERd %						261.2	
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)							1.0
			COPd							7.98
			Pdh kW							6.6
			PERd %		319.0			319.2		
		Tol (tem- perature operating limit)	COPd		2.11			2.14		2.16
			Pdh kW		4.9			5.9		6.5
			PERd %		84.3			85.6		86.4
			TOL °C					-22		
	G Condition (-15°CDB/-)	COPd		2.68					2.64	
		Pdh kW		6.0					7.0	
		PERd %		107.1					105.6	
		Tbiv COPd		2.95					2.64	
	Tbiv (bivalent tempera- ture)	Pdh kW		6.5					7.0	
		PERd %		118.1					105.6	
		Tbiv °C		-12					-15	
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C) kW		4.1			3.1		2.6
	Warm climate water outlet 35°C	General	Annual energy consumption	kWh						1,873
			ηs (Seasonal space heating efficiency)	%						242
			Prated at 2°C	kW						8.6
			Qhe Annual energy consumption (GCV)	Gj						7
B Condition (2°CDB- B/1°CWB)		Cdh (Degradation heating)							1.0	
		COPd							4.17	
		Pdh kW							6.8	
		PERd %							166.8	
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)							1.0	
		COPd							5.85	
		Pdh kW							5.5	
		PERd %							234.0	
Tbiv (bivalent tempera- ture)	COPd							4.89		
	Pdh kW							6.8		
	PERd %							195.6		
	Tbiv °C							5		
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)						1.0	
			COPd						7.78	
			Pdh kW						6.1	
			PERd %						311.2	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

(4)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |

(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1	
Heating capacity	Min.		kW						3.45 (1)	
	Nom.		kW						6.17 (2)	
	Max.		kW		7.95 (1)				9.25 (1)	
Cooling capacity	Nom.		kW		6.81 (3) / 6.47 (4)		7.97 (3) / 6.47 (4)		8.62 (3) / 6.47 (4)	
Power input	Heating	Min.	kW						0.70 (5)	
		Nom.	kW						1.21 (2)	
		Max.	kW		1.63 (5)			1.98 (5)		2.21 (5)
	Cooling	Nom.	kW		2.08 (3) / 1.13 (4)		2.57 (3) / 1.13 (4)		2.86 (3) / 1.13 (4)	
		Domestic hot water from 10°C to 50°C	Nom.	kWh	2.54 (6)	3.09 (6)	2.54 (6)	3.09 (6)	2.54 (6)	3.09 (6)
		Heat up time from 10°C to 50°C		hr	1h 51min	2h 10min	1h 51min	2h 10min	1h 51min	2h 10min
COP								5.10 (2)		
EER					3.28 (3) / 5.75 (4)		3.10 (4) / 5.75		3.01 (3) / 5.75 (4)	

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Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1		
Pump	Type	Grundfos UPM4L K 15-75 130 9 DK1									
	Nominal ESP Heating unit	kPa	67.1 (7)								
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3							
General	Supplier/Manufacturer details	Name and address		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
		Name or trademark		Daikin Europe N.V.							
	Product description	Air-to-water heat pump			Yes						
		Brine-to-water heat pump			No						
		Heat pump combination heater			Yes						
		Low-temperature heat pump			No						
		Supplementary heater integrated			Yes						
Water-to-water heat pump			No								
LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.0							
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	56.0							
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825							
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L		
		Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542					
		Other	Capacity control			Inverter					
			Pck (Crankcase heater mode)		kW	0.000					
			Poff (Off mode)		kW	0.027					
			Psb (Standby mode)		kW	0.027					
Pto (Thermostat off)		kW	0.024								
Domestic hot water heating	General	Declared load profile		L							
Space heating general	Integrated supplementary heater	Psup		9.0							
		Type of energy input		Electrical							
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)		kWh	851	787	851	787	851	787	
		COPdhw			2.80	3.05	2.80	3.05	2.80	3.05	
		Heat up time			1h 57min	2h 14min	1h 57min	2h 14min	1h 57min	2h 14min	
		η _{wh} (water heating efficiency)		%	120	130	120	130	120	130	
		Qelec (Daily electricity consumption)		kWh	4.160	3.830	4.160	3.830	4.160	3.830	
		Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0	
		Stand-by power input		W	50.7	43.9	50.7	43.9	50.7	43.9	
		Water heating energy efficiency class			A+						
		Cold climate	AEC (Annual electricity consumption)		kWh	937	866	937	866	937	866
			COPdhw			2.55	2.77	2.55	2.77	2.55	2.77
			Heat up time			1h 55min	2h 02min	1h 55min	2h 02min	1h 55min	2h 02min
			η _{wh} (water heating efficiency)		%	109	118	109	118	109	118
			Qelec (Daily electricity consumption)		kWh	4.570	4.200	4.570	4.200	4.570	4.200
			Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0
		Warm climate	Stand-by power input		W	54.3	46.7	54.3	46.7	54.3	46.7
AEC (Annual electricity consumption)			kWh	699	648	699	648	699	648		
COPdhw				3.40	3.68	3.40	3.68	3.40	3.68		
Heat up time				1h 54min	2h 06min	1h 54min	2h 06min	1h 54min	2h 06min		
η _{wh} (water heating efficiency)			%	147	158	147	158	147	158		
Qelec (Daily electricity consumption)			kWh	3.430	3.160	3.430	3.160	3.430	3.160		
Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0			
Stand-by power input		W	44.6	39.0	44.6	39.0	44.6	39.0			

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Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1		
Space heating Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,442		7,423		7,210			
		ηs (Seasonal space heating efficiency)	%		136				140		
		Prated at -10°C	kW				12.5				
		Qhe Annual energy consumption (GCV)	Gj		27				26		
		SCOP			3.47		3.48		3.58		
		Seasonal space heating eff. class					A++				
		A Condition (-7°C-D- B/-8°CWB)	Cdh (Degradation heating)				1.0				
			COPd				2.34				
			Pdh	kW			7.6				
			PERd	%			93.6				
		B Condition (2°C-D- B/1°CWB)	Cdh (Degradation heating)				1.0				
			COPd				3.50				
			Pdh	kW			6.8				
			PERd	%			140.0				
		C Condition (7°C-D- B/6°CWB)	Cdh (Degradation heating)				1.0				
		Space heating Average climate water outlet 55°C	General	COPd				5.07			
				Pdh	kW			4.5			
PERd	%					202.8					
D Condition (12°C-D- B/11°CWB)	Cdh (Degradation heating)						1.0				
	COPd						6.23				
	Pdh			kW			5.2				
	PERd			%			249.2				
Tol (temperature operating limit)	COPd				2.04			2.06			
	Pdh			kW	6.9			8.2			
	PERd			%	81.6			82.4			
	TOL			°C				-10			
	WTOL			°C				55			
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)			kW	5.6			4.3			
Tbiv (bivalent temperature)	COPd					2.90			2.48		
	Pdh			kW		8.5			10.0		
	PERd			%		116.0			99.2		
	Tbiv			°C		-2			-5		
Cold climate water outlet 55°C	General	Annual energy consumption	kWh	7,028		6,890		6,861			
		ηs (Seasonal space heating efficiency)	%	123			126				
		Prated at -22°C	kW				9.0				
		Qhe Annual energy consumption (GCV)	Gj				25				
		A Condition (-7°C-D- B/-8°CWB)	Cdh (Degradation heating)				1.0				
			COPd				2.61				
			Pdh	kW			5.2				
			PERd	%	104.2			104.4			
		B Condition (2°C-D- B/1°CWB)	Cdh (Degradation heating)				1.0				
			COPd				3.90				
			Pdh	kW			3.3				
			PERd	%			156.0				
		C Condition (7°C-D- B/6°CWB)	Cdh (Degradation heating)				1.0				
			COPd				4.96				
			Pdh	kW			3.4				
			PERd	%			198.3				
		D Condition (12°C-D- B/11°CWB)	COPd				6.56				
	Pdh	kW			4.2						
	PERd	%			262.5						
Tol (temperature operating limit)	COPd		1.49			1.56		1.62			

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Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1	
Space heating Cold climate water outlet 55°C	Tol (tem- perature operating limit)	Pdh	kW	4.9		6.1		7.2		
		PERd	%	59.6		62.3		64.7		
		TOL	°C			-22				
		WTOL	°C			55				
	G Condition (-15°CDB/-)	COPd		2.00			2.03			
		Pdh	kW	6.0		7.2				
		PERd	%	80.0		81.2				
	Tbiv (bivalent tempera- ture)	COPd		2.25		2.03				
		Pdh	kW	6.6		7.2				
		PERd	%	90.0		81.2				
	Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)	kW	4.1		2.9		1.8		
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh			2,853			
			ηs (Seasonal space heating efficiency)	%			177			
			Prated at 2°C	kW			9.6			
			Qhe Annual energy consumption (GCV)	Gj			10			
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)	COPd				1.0		
				Pdh	kW			2.66		
				PERd	%			8.0		
								106.5		
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)	COPd				1.0			
			Pdh	kW			3.79			
			PERd	%			6.7			
							151.5			
D Condition (12°CDB- B/11°CWB)		Cdh (Degradation heating)	COPd				1.0			
			Pdh	kW			5.87			
			PERd	%			3.6			
							234.9			
Tbiv (bivalent tempera- ture)		COPd					3.13			
			Pdh	kW			8.4			
			PERd	%			125.4			
			Tbiv	°C			4			
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,462		3,440				
		ηs (Seasonal space heating efficiency)	%	195		196				
		Prated at -10°C	kW			8.3				
		Qhe Annual energy consumption (GCV)	Gj			12				
		SCOP		4.95		4.98				

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Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1	
Space heating 	Average climate water outlet 35°C	General	Seasonal space heating eff. class	A+++						
		A Condition	COPd	3.20						
		B/-8°CWB)	Pdh	kW	7.5					
			PERd	%	128.0					
			B Condition	Cdh (Degradation heating)	1.0					
		(2°C- B/1°CWB)	COPd		4.93					
			Pdh	kW	4.4					
			PERd	%	197.2					
		C Condition	Cdh (Degradation heating)		1.0					
			(7°C- B/6°CWB)	COPd	6.37					
			Pdh	kW	4.3					
		D Condition	PERd	%	254.8					
			Cdh (Degradation heating)		1.0					
			(12°C- B/11°CWB)	COPd	8.13					
		Tol (tem- perature operating limit)	Pdh	kW	6.6					
			PERd	%	325.2					
			TOL	°C	-10					
		Tbiv (bivalent tempera- ture)	WTOL	°C	35					
			COPd		2.90			2.86		
			Pdh	kW	6.9			8.1		
		Rated heat output supplementary capacity	PERd	%	116.0			114.4		
			Tbiv	°C						
			Psup (at Tdesign -10°C)	kW	1.4			0.0		
		Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,334		5,180		5,165
ηs (Seasonal space heating efficiency)	%			163		168		169		
Prated at -22°C	kW					9				
Qhe Annual energy consumption (GCV)	Gj			19.2		18.6				
A Condition	COPd					3.48				
B/-8°CWB)	Pdh		kW			5.4				
	PERd		%			139.2				
	B Condition		Cdh (Degradation heating)			1.0				
(2°C- B/1°CWB)	COPd					5.40				
	Pdh		kW			3.6				
	PERd	%			216.0					

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Technical specifications				ELVX12S18E9W + ERRA08EW1	ELVX12S23E9W + ERRA08EW1	ELVX12S18E9W + ERRA10EW1	ELVX12S23E9W + ERRA10EW1	ELVX12S18E9W + ERRA12EW1	ELVX12S23E9W + ERRA12EW1
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/6°CWB)	Cdh (Degradation heating)	1.0					
			COPd	6.53					
			Pdh kW	5.3					
			PERd %	261.2					
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)	1.0					
			COPd	7.98					
			Pdh kW	6.6					
			PERd %	319.0			319.2		
		Tol (tem- perature operating limit)	COPd	2.11		2.14		2.16	
			Pdh kW	4.9		5.9		6.5	
			PERd %	84.3		85.6		86.4	
			TOL °C			-22			
	G Condition (-15°CDB/-)	COPd	2.68			2.64			
		Pdh kW	6.0			7.0			
		PERd %	107.1			105.6			
		Tbiv COPd	2.95			2.64			
	Tbiv (bivalent tempera- ture)	Pdh kW	6.5			7.0			
		PERd %	118.1			105.6			
		Tbiv °C	-12			-15			
		Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C) kW	4.1		3.1		2.6	
	Warm climate water outlet 35°C	General	Annual energy consumption	1,873					
			ηs (Seasonal space heating efficiency)	242					
			Prated at 2°C	8.6					
			Qhe Annual energy consumption (GCV)	7					
B Condition (2°CDB- B/1°CWB)		Cdh (Degradation heating)	1.0						
		COPd	4.17						
		Pdh kW	6.8						
		PERd %	166.8						
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)	1.0						
		COPd	5.85						
		Pdh kW	5.5						
		PERd %	234.0						
Tbiv (bivalent tempera- ture)	COPd	4.89							
	Pdh kW	6.8							
	PERd %	195.6							
	Tbiv °C	5							
Space heating 	Warm climate water outlet 35°C	D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)	1.0					
			COPd	7.78					
			Pdh kW	6.1					
			PERd %	311.2					

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
 (2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
 (3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
 (4)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
 (5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
 (6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
 (7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1
Heating capacity	Min.		kW	3.45 (1)					
	Nom.		kW	6.17 (2)					
	Max.		kW	7.95 (1)				9.97 (1)	
Power input	Heating	Min.	kW	0.70 (3)					
		Nom.	kW	1.21 (2)					
		Max.	kW	1.63 (3)		1.98 (3)		2.21 (3)	
	Domestic hot water from 10°C to 50°C	Nom.	kWh	2.54 (4)	3.09 (4)	2.54 (4)	3.09 (4)	2.54 (4)	3.09 (4)
Heat up time from 10°C to 50°C		hr	1h 51min	2h 10min	1h 51min	2h 10min	1h 51min	2h 10min	
COP			5.10 (2)						
Pump	Type		Grundfos UPM4L K 15-75 130 9 DKI						
Pump Additional Zone	Nominal ESP Heating unit		61.4 (5)						

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Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1	
Pump Main Zone	Nominal ESP unit	Heating	kPa	59.5 (5)						
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3						
General	Supplier/Manufacturer details	Name and address	Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium							
		Name or trademark	Daikin Europe N.V.							
	Product description	Air-to-water heat pump	Yes							
		Brine-to-water heat pump	No							
		Heat pump combination heater	Yes							
		Low-temperature heat pump	No							
		Supplementary heater integrated	Yes							
Water-to-water heat pump	No									
LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.0						
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	56.0						
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825						
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542						
	Other	Capacity control		Inverter						
		Pck (Crankcase heater mode)	kW	0.000						
		Poff (Off mode)	kW	0.027						
		Psb (Standby mode)	kW	0.027						
		Pto (Thermostat off)	kW	0.024						
Domestic hot water heating	General	Declared load profile		L						
Space heating general	Integrated supplementary heater	Psup	kW	6.0						
		Type of energy input		Electrical						
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)	kWh	851	787	851	787	851	787	
		COPdhw		2.80	3.05	2.80	3.05	2.80	3.05	
Domestic hot water heating	Average climate	Heat up time		1h 57min	2h 14min	1h 57min	2h 14min	1h 57min	2h 14min	
		η _{wh} (water heating efficiency)	%	120	130	120	130	120	130	
		Qelec (Daily electricity consumption)	kWh	4.160	3.830	4.160	3.830	4.160	3.830	
		Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0	
		Stand-by power input	W	50.7	43.9	50.7	43.9	50.7	43.9	
		Water heating energy efficiency class		A+						
	Cold climate	AEC (Annual electricity consumption)	kWh	937	866	937	866	937	866	
		COPdhw		2.55	2.77	2.55	2.77	2.55	2.77	
		Heat up time		1h 55min	2h 02min	1h 55min	2h 02min	1h 55min	2h 02min	
		η _{wh} (water heating efficiency)	%	109	118	109	118	109	118	
		Qelec (Daily electricity consumption)	kWh	4.570	4.200	4.570	4.200	4.570	4.200	
		Reference hot water temperature	°C	53.0	52.0	53.0	52.0	53.0	52.0	
	Warm climate	Stand-by power input	W	54.3	46.7	54.3	46.7	54.3	46.7	
		AEC (Annual electricity consumption)	kWh	699	648	699	648	699	648	
COPdhw			3.40	3.68	3.40	3.68	3.40	3.68		
Heat up time			1h 54min	2h 06min	1h 54min	2h 06min	1h 54min	2h 06min		
η _{wh} (water heating efficiency)		%	147	158	147	158	147	158		
Qelec (Daily electricity consumption)		kWh	3.430	3.160	3.430	3.160	3.430	3.160		
Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0		
Stand-by power input		W	44.6	39.0	44.6	39.0	44.6	39.0		

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Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1		
Space heating	Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309		
			ηs (Seasonal space heating efficiency)	%		134		138			
			Prated at -10°C	kW			12.5				
			Qhe Annual energy consumption (GCV)	Gj		27		26			
			SCOP		3.42		3.43		3.53		
			Seasonal space heating eff. class				A++				
			A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)			1.0				
				COPd			2.34				
				Pdh	kW		7.6				
				PERd	%		93.6				
			B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0				
				COPd			3.50				
				Pdh	kW		6.8				
				PERd	%		140.0				
			C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0				
				COPd			5.07				
				Pdh	kW		4.5				
				PERd	%		202.8				
			Space heating	Average climate water outlet 55°C	General	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)			1.0	
							COPd			6.23	
	Pdh	kW					5.2				
	PERd	%					249.2				
Tol (temperature operating limit)	COPd					2.04		2.06			
	Pdh	kW				6.9		8.2			
	PERd	%				81.6		82.4			
	TOL	°C						-10			
	WTOL	°C						55			
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW				5.6		4.3			
Tbiv (bivalent temperature)	COPd					2.90		2.48			
	Pdh	kW				8.5		10.0			
	PERd	%				116.0		99.2			
	Tbiv	°C				-2		-5			
Cold climate water outlet 55°C	General	Annual energy consumption				kWh	7,088		6,950		6,921
		ηs (Seasonal space heating efficiency)				%	122		125		
		Prated at -22°C				kW			9.0		
		Qhe Annual energy consumption (GCV)				Gj	26		25		
		A Condition (-7°CDB/-8°CWB)				Cdh (Degradation heating)			1.0		
						COPd			2.61		
			Pdh	kW		5.2					
			PERd	%	104.2		104.4				
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)			1.0					
			COPd			3.90					
			Pdh	kW		3.3					
			PERd	%		156.0					
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)			1.0					
			COPd			4.96					
			Pdh	kW		3.4					
			PERd	%		198.3					
		D Condition (12°CDB/11°CWB)	COPd			6.56					
			Pdh	kW		4.2					
			PERd	%		262.5					
		Tol (temperature operating limit)	COPd		1.49		1.56		1.62		
	Pdh	kW	4.9		6.1		7.2				
	PERd	%	59.6		62.3		64.7				

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Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1		
Space heating 	Cold climate water outlet 55°C	Tol (tem- perature operating limit)	TOL °C				-22				
			WTOL °C				55				
	G Condition (-15°CDB/-)	COPd			2.00			2.03			
			Pdh kW		6.0			7.2			
	Tbiv (bivalent tempera- ture)	COPd			2.25			2.03			
			Pdh kW		6.6			7.2			
	Rated heat output sup- plementary capacity	PERd %			80.0			81.2			
			Tbiv °C		-12			-15			
	Warm climate water outlet 55°C	General	Psup (at Tdesign -22°C) kW		4.1		2.9		1.8		
			Annual energy consumption	kWh			2,972				
			ηs (Seasonal space heating efficiency)	%			170				
			Prated at 2°C	kW			9.6				
		B Condition (2°CDB- B/1°CWB)	COPd	Qhe Annual energy consumption (GCV)	Gj			11			
				Cdh (Degradation heating)				1.0			
Pdh kW							2.66				
PERd %							8.0				
C Condition (7°CDB- B/6°CWB)		COPd					106.5				
			Cdh (Degradation heating)				1.0				
			Pdh kW				3.79				
			PERd %				6.7				
D Condition (12°CDB- B/11°CWB)		COPd					151.5				
			Cdh (Degradation heating)				1.0				
	Pdh kW					5.87					
	PERd %					3.6					
Tbiv (bivalent tempera- ture)	COPd					234.9					
		Pdh kW				3.13					
		PERd %				8.4					
		Tbiv °C				125.4					
Average climate water outlet 35°C	General					4					
		Annual energy consumption	kWh	3,561		3,539					
		ηs (Seasonal space heating efficiency)	%	190		191					
		Prated at -10°C	kW			8.3					
		Qhe Annual energy consumption (GCV)	Gj			13					
	A Condition (-7°CDB- B/-8°CWB)	SCOP			4.81		4.84				
			Seasonal space heating eff. class				A+++				
			COPd				3.20				

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Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1	
Space heating Average climate water outlet 35°C	A Condition (-7°CDB/-8°CWB)	Pdh	kW					7.5		
		PERd	%					128.0		
	B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)						1.0		
		COPd						4.93		
		Pdh	kW					4.4		
		PERd	%					197.2		
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)						1.0		
		COPd						6.37		
		Pdh	kW					4.3		
		PERd	%					254.8		
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)						1.0		
		COPd						8.13		
		Pdh	kW					6.6		
		PERd	%					325.2		
	Tol (temperature operating limit)	COPd			2.90				2.86	
		Pdh	kW		6.9				8.1	
		PERd	%		116.0				114.4	
		TOL	°C						-10	
	Tbiv (bivalent temperature)	WTOL	°C						35	
		COPd			3.20				2.86	
	Pdh	kW		7.5				8.1		
	PERd	%		128.0				114.4		
	Tbiv	°C		-7				-10		
Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW		1.4				0.0		
Cold climate water outlet 35°C	General	Annual energy consumption	kWh	5,394			5,239		5,224	
		ηs (Seasonal space heating efficiency)	%	162			166		167	
		Prated at -22°C	kW					9		
		Qhe Annual energy consumption (GCV)	Gj	19.4			18.9		18.8	
	A Condition (-7°CDB/-8°CWB)	COPd						3.48		
	Pdh	kW					5.4			
	PERd	%					139.2			
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)						1.0			
	COPd						5.40			
	Pdh	kW					3.6			
	PERd	%					216.0			
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)						1.0			
	COPd						6.53			

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Technical specifications				ELVZ12S18E6V + ERRA08EW1	ELVZ12S23E6V + ERRA08EW1	ELVZ12S18E6V + ERRA10EW1	ELVZ12S23E6V + ERRA10EW1	ELVZ12S18E6V + ERRA12EW1	ELVZ12S23E6V + ERRA12EW1		
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/6°CWB)	Pdh	kW						5.3	
			PERd	%						261.2	
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)								1.0
			COPd								7.98
			Pdh	kW						6.6	
			PERd	%	319.0				319.2		
		Tol (tem- perature operating limit)	COPd			2.11			2.14		2.16
			Pdh	kW	4.9			5.9			6.5
			PERd			84.3			85.6		86.4
			TOL								-22
					WTOL						35
		G Condition (-15°CDB/-)	COPd			2.68					2.64
	Pdh		kW	6.0					7.0		
				PERd						105.6	
	Tbiv (bivalent tempera- ture)	COPd			2.95					2.64	
		Pdh	kW	6.5					7.0		
				PERd						105.6	
				Tbiv						-15	
	Rated heat output sup- plementary capacity			Psup (at Tdesign -22°C)			4.1	3.1	2.6		
	Warm climate water outlet 35°C	General	Annual energy consumption								1,993
			ηs (Seasonal space heating efficiency)								228
			Prated at 2°C								8.6
			Qhe Annual energy consumption (GCV)								7
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)								1.0
COPd								4.17			
Pdh			kW						6.8		
PERd			%						166.8		
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)								1.0	
		COPd								5.85	
		Pdh	kW						5.5		
		PERd	%						234.0		
Tbiv (bivalent tempera- ture)	COPd								4.89		
	Pdh	kW						6.8			
	PERd	%						195.6			
	Tbiv	°C						5			
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)								1.0		
	COPd								7.78		
Space heating 	Warm climate water outlet	D Condition (12°CDB- B/11°CWB)	Pdh	kW						6.1	
			PERd	%						311.2	

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical specifications				ELVZ12S18E9V + ERRA08EW1	ELVZ12S23E9V + ERRA08EW1	ELVZ12S18E9V + ERRA10EW1	ELVZ12S23E9V + ERRA10EW1	ELVZ12S18E9V + ERRA12EW1	ELVZ12S23E9V + ERRA12EW1	
Heating capacity	Min.								3.45 (1)	
	Nom.								6.17 (2)	
	Max.			7.95 (1)				9.97 (1)		
Power input	Heating	Min.								0.70 (3)
		Nom.								1.21 (2)
		Max.			1.63 (3)			1.98 (3)	2.21 (3)	
	Domestic hot water from 10°C to 50°C	Nom.	kWh	2.54 (4)	3.09 (4)	2.54 (4)	3.09 (4)	2.54 (4)	3.09 (4)	
Heat up time from 10°C to 50°C			hr	1h 51min	2h 10min	1h 51min	2h 10min	1h 51min	2h 10min	
COP									5.10 (2)	
Pump	Type								Grundfos UPM4L K 15-75 130 9 DK1	
Pump Additional Zone	Nominal ESP Heating unit								61.4 (5)	

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Technical specifications				ELVZ12S18E9W + ERRA08EW1	ELVZ12S23E9W + ERRA08EW1	ELVZ12S18E9W + ERRA10EW1	ELVZ12S23E9W + ERRA10EW1	ELVZ12S18E9W + ERRA12EW1	ELVZ12S23E9W + ERRA12EW1	
Pump Main Zone	Nominal ESP unit	Heating	kPa	59.5 (5)						
Water side Heat exchanger	Water flow rate	Heating Nom.	l/min	18.3						
General	Supplier/Manufacturer details	Name and address Name or trademark		Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium Daikin Europe N.V.						
	Product description	Air-to-water heat pump		Yes						
		Brine-to-water heat pump		No						
		Heat pump combination heater		Yes						
		Low-temperature heat pump		No						
		Supplementary heater integrated		Yes						
	Water-to-water heat pump		No							
LW(A) Sound power level (according to EN14825)	Indoor		dB(A)	44.0						
LW(A) Sound power level (according to EN14825)	Outdoor		dB(A)	56.0						
Sound condition Ecodesign and energy label				Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825						
Tank	Name			Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	Stainless steel domestic hot water tank 180 l	Stainless steel domestic hot water tank 230 L	
Space heating general	Air to water unit	Rated airflow (outdoor)	m ³ /h	3,542						
	Other	Capacity control		Inverter						
		Pck (Crankcase heater mode)		kW	0.000					
		Poff (Off mode)		kW	0.027					
		Psb (Standby mode)		kW	0.027					
Pto (Thermostat off)		kW	0.024							
Domestic hot water heating	General	Declared load profile		L						
Space heating general	Integrated supplementary heater	Psup	kW	9.0						
		Type of energy input		Electrical						
Domestic hot water heating	Average climate	AEC (Annual electricity consumption)		851	787	851	787	851	787	
		COPdhw		2.80	3.05	2.80	3.05	2.80	3.05	
Domestic hot water heating	Average climate	Heat up time		1h 57min	2h 14min	1h 57min	2h 14min	1h 57min	2h 14min	
		η _{wh} (water heating efficiency)		%	120	130	120	130	120	130
		Qelec (Daily electricity consumption)		kWh	4.160	3.830	4.160	3.830	4.160	3.830
		Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0
		Stand-by power input		W	50.7	43.9	50.7	43.9	50.7	43.9
	Water heating energy efficiency class		A+							
	Cold climate	AEC (Annual electricity consumption)		kWh	937	866	937	866	937	866
		COPdhw			2.55	2.77	2.55	2.77	2.55	2.77
		Heat up time			1h 55min	2h 02min	1h 55min	2h 02min	1h 55min	2h 02min
		η _{wh} (water heating efficiency)		%	109	118	109	118	109	118
Qelec (Daily electricity consumption)		kWh	4.570	4.200	4.570	4.200	4.570	4.200		
Warm climate	Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0	
	Stand-by power input		W	54.3	46.7	54.3	46.7	54.3	46.7	
	AEC (Annual electricity consumption)		kWh	699	648	699	648	699	648	
	COPdhw			3.40	3.68	3.40	3.68	3.40	3.68	
	Heat up time			1h 54min	2h 06min	1h 54min	2h 06min	1h 54min	2h 06min	
η _{wh} (water heating efficiency)		%	147	158	147	158	147	158		
Qelec (Daily electricity consumption)		kWh	3.430	3.160	3.430	3.160	3.430	3.160		
Reference hot water temperature		°C	53.0	52.0	53.0	52.0	53.0	52.0		
Stand-by power input		W	44.6	39.0	44.6	39.0	44.6	39.0		

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Technical specifications				ELVZ12S18E9W + ERRA08EW1	ELVZ12S23E9W + ERRA08EW1	ELVZ12S18E9W + ERRA10EW1	ELVZ12S23E9W + ERRA10EW1	ELVZ12S18E9W + ERRA12EW1	ELVZ12S23E9W + ERRA12EW1		
Space heating Average climate water outlet 55°C	General	Annual energy consumption	kWh	7,541		7,522		7,309			
		ηs (Seasonal space heating efficiency)	%		134				138		
		Prated at -10°C	kW				12.5				
		Qhe Annual energy consumption (GCV)	Gj		27				26		
		SCOP			3.42		3.43		3.53		
		Seasonal space heating eff. class					A++				
		A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)				1.0				
			COPd				2.34				
			Pdh	kW			7.6				
			PERd	%			93.6				
		B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)				1.0				
			COPd				3.50				
			Pdh	kW			6.8				
			PERd	%			140.0				
		C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)				1.0				
			COPd				5.07				
			Pdh	kW			4.5				
	PERd	%			202.8						
Space heating Average climate water outlet 55°C	General	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)					1.0			
			COPd					6.23			
			Pdh	kW				5.2			
			PERd	%				249.2			
		Tol (temperature operating limit)	COPd		2.04				2.06		
			Pdh	kW	6.9				8.2		
			PERd	%	81.6				82.4		
			TOL	°C					-10		
			WTOL	°C					55		
		Rated heat output supplementary capacity	Psup (at Tdesign -10°C)	kW	5.6				4.3		
		Tbiv (bivalent temperature)	COPd			2.90			2.48		
			Pdh	kW		8.5			10.0		
			PERd	%		116.0			99.2		
			Tbiv	°C		-2			-5		
		Cold climate water outlet 55°C	General	Annual energy consumption	kWh	7,088		6,950		6,921	
				ηs (Seasonal space heating efficiency)	%	122			125		
				Prated at -22°C	kW				9.0		
Qhe Annual energy consumption (GCV)	Gj			26				25			
A Condition (-7°CDB/-8°CWB)	Cdh (Degradation heating)						1.0				
	COPd						2.61				
	Pdh			kW			5.2				
	PERd			%	104.2			104.4			
B Condition (2°CDB/1°CWB)	Cdh (Degradation heating)						1.0				
	COPd						3.90				
	Pdh			kW			3.3				
	PERd			%			156.0				
C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)						1.0				
	COPd						4.96				
	Pdh			kW			3.4				
	PERd			%			198.3				
D Condition (12°CDB/11°CWB)	COPd						6.56				
	Pdh	kW			4.2						
	PERd	%			262.5						
Tol (temperature operating limit)	COPd		1.49			1.56		1.62			
	Pdh	kW	4.9			6.1		7.2			
	PERd	%	59.6			62.3		64.7			

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Technical specifications				ELVZ12S18E9W + ERRA08EW1	ELVZ12S23E9W + ERRA08EW1	ELVZ12S18E9W + ERRA10EW1	ELVZ12S23E9W + ERRA10EW1	ELVZ12S18E9W + ERRA12EW1	ELVZ12S23E9W + ERRA12EW1	
Space heating Cold climate water outlet 55°C	Tol (temperature operating limit)	TOL °C					-22			
		WTOL °C					55			
	G Condition (-15°CDB/-)	COPd		2.00				2.03		
		Pdh	kW	6.0				7.2		
		PERd	%	80.0				81.2		
	Tbiv (bivalent temperature)	COPd		2.25				2.03		
		Pdh	kW	6.6				7.2		
		PERd	%	90.0				81.2		
		Tbiv	°C	-12				-15		
	Rated heat output supplementary capacity	Psup (at Tdesign -22°C)	kW	4.1			2.9		1.8	
	Warm climate water outlet 55°C	General	Annual energy consumption	kWh				2,972		
			ηs (Seasonal space heating efficiency)	%				170		
			Prated at 2°C	kW				9.6		
Qhe Annual energy consumption (GCV)			Gj				11			
B Condition (2°CDB- B/1°CWB)		Cdh (Degradation heating)					1.0			
		COPd					2.66			
		Pdh	kW				8.0			
		PERd	%				106.5			
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)					1.0			
		COPd					3.79			
		Pdh	kW				6.7			
		PERd	%				151.5			
D Condition (12°CDB- B/11°CWB)		Cdh (Degradation heating)					1.0			
		COPd					5.87			
		Pdh	kW				3.6			
		PERd	%				234.9			
Tbiv (bivalent temperature)		COPd					3.13			
	Pdh	kW				8.4				
	PERd	%				125.4				
	Tbiv	°C				4				
Average climate water outlet 35°C	General	Annual energy consumption	kWh	3,561			3,539			
		ηs (Seasonal space heating efficiency)	%	190			191			
		Prated at -10°C	kW				8.3			
		Qhe Annual energy consumption (GCV)	Gj				13			
		SCOP		4.81			4.84			
	Seasonal space heating eff. class					A+++				
	A Condition (-7°CDB- B/-8°CWB)	COPd					3.20			

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2 - 1 Specifications

Technical specifications				ELVZ12S18E9W + ERRA08EW1	ELVZ12S23E9W + ERRA08EW1	ELVZ12S18E9W + ERRA10EW1	ELVZ12S23E9W + ERRA10EW1	ELVZ12S18E9W + ERRA12EW1	ELVZ12S23E9W + ERRA12EW1	
Space heating Cold climate water outlet 35°C	Average climate water outlet	A Condition (-7°CDB/-8°CWB)	Pdh PERd	kW %			7.5 128.0			
	35°C	B Condition (2°CDB/-1°CWB)	Cdh (Degradation heating)				1.0			
			COPd				4.93			
			Pdh	kW			4.4			
			PERd	%			197.2			
	C Condition (7°CDB/6°CWB)	Cdh (Degradation heating)	COPd				1.0			
			COPd				6.37			
			Pdh	kW			4.3			
			PERd	%			254.8			
	D Condition (12°CDB/11°CWB)	Cdh (Degradation heating)	COPd				1.0			
			COPd				8.13			
			Pdh	kW			6.6			
			PERd	%			325.2			
	Tol (temperature operating limit)	COPd				2.90			2.86	
			Pdh	kW		6.9			8.1	
			PERd	%		116.0			114.4	
			TOL	°C				-10		
	Tbiv (bivalent temperature)	WTOL						35		
			COPd			3.20			2.86	
			Pdh	kW		7.5			8.1	
			PERd	%		128.0			114.4	
	Rated heat output supplementary capacity	Tbiv				-7			-10	
			Psup (at Tdesign -10°C)	kW		1.4			0.0	
	Cold climate water outlet 35°C	General	Annual energy consumption		kWh		5,394		5,239	5,224
			ηs (Seasonal space heating efficiency)		%		162		166	167
Prated at -22°C				kW				9		
Qhe Annual energy consumption (GCV)				Gj		19.4		18.9	18.8	
A Condition (-7°CDB/-8°CWB)		COPd						3.48		
			Pdh	kW				5.4		
B Condition (2°CDB/-1°CWB)		PERd						139.2		
			Cdh (Degradation heating)					1.0		
C Condition (7°CDB/6°CWB)		COPd						5.40		
			Pdh	kW				3.6		
D Condition (12°CDB/11°CWB)	PERd						216.0			
		Cdh (Degradation heating)					1.0			
E Condition (17°CDB/16°CWB)	COPd						6.53			
		Pdh	kW							

2 Specifications

2 - 1 Specifications

2

Technical specifications				ELVZ12S18E9W + ERRA08EW1	ELVZ12S23E9W + ERRA08EW1	ELVZ12S18E9W + ERRA10EW1	ELVZ12S23E9W + ERRA10EW1	ELVZ12S18E9W + ERRA12EW1	ELVZ12S23E9W + ERRA12EW1				
Space heating 	Cold climate water outlet 35°C	C Condition (7°CDB- B/6°CWB)	Pdh	kW						5.3			
			PERd	%						261.2			
		D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)								1.0		
			COPd								7.98		
			Pdh	kW						6.6			
			PERd	%	319.0				319.2				
		Tol (tem- perature operating limit)	COPd			2.11				2.14	2.16		
			Pdh	kW	4.9				5.9	6.5			
			PERd			84.3				85.6	86.4		
			TOL								-22		
			WTOL								35		
			G Condition (-15°CDB/-)	COPd			2.68				2.64		
	Pdh	kW		6.0				7.0					
		PERd			107.1				105.6				
		Tbiv (bivalent tempera- ture)	COPd			2.95				2.64			
	Pdh		kW	6.5				7.0					
		PERd			118.1				105.6				
		Tbiv	°C	-12				-15					
	Rated heat output sup- plementary capacity	Psup (at Tdesign -22°C)			4.1				3.1	2.6			
	Warm climate water outlet 35°C	General	Annual energy consumption								1,993		
			ηs (Seasonal space heating efficiency)								228		
			Prated at 2°C								8.6		
			Qhe Annual energy consumption (GCV)								7		
		B Condition (2°CDB- B/1°CWB)	Cdh (Degradation heating)								1.0		
COPd								4.17					
Pdh			kW	6.8						6.8			
PERd			%	166.8						166.8			
C Condition (7°CDB- B/6°CWB)		Cdh (Degradation heating)								1.0			
		COPd								5.85			
		Pdh	kW	5.5						5.5			
		PERd	%	234.0						234.0			
Tbiv (bivalent tempera- ture)	COPd								4.89				
	Pdh	kW	6.8						6.8				
	PERd	%	195.6						195.6				
	Tbiv	°C	5						5				
D Condition (12°CDB- B/11°CWB)	Cdh (Degradation heating)								1.0				
	COPd								7.78				
Space heating 	Warm climate water outlet	D Condition (12°CDB- B/11°CWB)	Pdh	kW						6.1			
			PERd	%						311.2			

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |

(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C. (DT = 5°C) |

(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |

(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |

Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |

Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB

Technical Specifications				ERRA08EW1	ERRA10EW1	ERRA12EW1
Casing	Colour	Silver / Black				
	Material	Polyester painted galvanised steel plate				
Dimensions	Unit	Height	mm	1,003		
		Width	mm	1,270		
		Depth	mm	533		
	Packed unit	Height	mm	1,340		
		Width	mm	1,440		
		Depth	mm	690		
Weight	Unit	kg	107			
	Packed unit	kg	132			
Packing	Material	Carton / Wood (pallet) / PE (Straps) / Metal				
	Weight	kg	46			

2 Specifications

2 - 1 Specifications

Technical Specifications				ERRA08EW1	ERRA10EW1	ERRA12EW1	
Heat exchanger	Length					1,200	
	Rows	Quantity				2	
	Fin pitch					2.00	
	Passes	Quantity				10	
	Face area	m ²				1.19	
	Stages	Quantity				44	
	Tube type					ø7 Hi-XSL	
	Fin	Type					WF fin
	Treatment					Anti-corrosion treatment (PE)	
Fan	Type					Propeller fan	
	Quantity					1	
	Air flow rate	Heating	Nom.	m ³ /min			59.0
			High	m ³ /min			89.9
		Cooling	Nom.	m ³ /min			80
			High	m ³ /min			80.1
Discharge direction					Horizontal		
Fan motor	Quantity					1	
	Model					Brushless DC motor	
	Output	W				234	
	Drive					Direct drive	
	Speed	Steps					6
		Heating	Nom.	rpm			390
Cooling		Nom.	rpm			520	
Compressor	Quantity					1	
Compressor	Model					2Y260BPDY1P#C	
	Type					Hermetically sealed swing compressor	
	Starting method					Inverter driven	
PED	Category					Category II	
Operation range	Heating	Min.	°CDB			-25.0	
		Max.	°CDB			25	
	Cooling	Min.	°CDB			10	
		Max.	°CDB			43	
	Domestic hot water	Max.	°CDB			35	
		Min.	°CDB			-25	
PED	Most critical part	Name				Accumulator	
		Ps*V	Bar*l			109	
Sound power level	Heating	Nom.	dBA			56.0 (1)	
	Cooling	Nom.	dBA	61.2 (2)	61.4 (2)	60.9 (2)	
Sound pressure level	Heating	Nom.	dBA			41.1 (3)	
	Cooling	Nom.	dBA	47.1 (4)	47.2 (4)		
	Night quiet mode	Heating		dBA			43.2 (3)
		Cooling		dBA			44.0 (4)
Refrigerant	Type					R-32	
	GWP					675.0	
	Charge	kg				3.25	
	Control					Expansion valve	
	Circuits	Quantity				1	
Refrigerant oil	Type					FW68DE	
	Charged volume	l				1.1	
Piping connections	Liquid	OD	mm			6.35	
	Gas	OD	mm			15.9	
	Piping length	OU - IU	Min.	m			3
			Max.	m			50
	High pressure side	Design pressure				46	
	Additional refrigerant charge		kg/m		0.02 (for piping length exceeding 10m)		
	Level difference	IU - OU	Max.	m			30.0
Defrost method					Reversed cycle		
Defrost control					Sensor for outdoor heat exchanger temperature		
Capacity control	Method				Inverter controlled		
Safety devices	Item	01			High pressure switch		
		02			High pressure switch		
Safety devices	Item	03			Low pressure switch		
		04			Thermal protector for compressor		
		05			Fuse		

2 Specifications

2 - 1 Specifications

2

Electrical Specifications			ERRA08EW1	ERRA10EW1	ERRA12EW1	
Power supply	Name			W1		
	Phase			3~		
	Frequency	Hz		50		
	Voltage	V		400		
	Voltage range	Min.	%		-10	
		cos phi	Nom.		0.72	
			Max.		0.93	
	Max.	%		10		
Current	Minimum Ssc value	kVa	Equipment complying with EN / IEC 61000-3-12			
	Recommended fuses	A	16			
	Inverter modulation	Min. %	44	37	35	
Wiring connections	For power supply	Remark	See installation manual outdoor unit			
	For connection with indoor	Remark	See installation manual indoor unit			

(1)Cooling Ta 35°C - LWE 18°C (DT = 5°C); Heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |

(2)Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C) |

(3)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

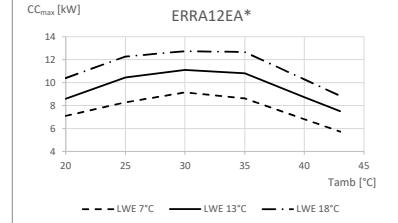
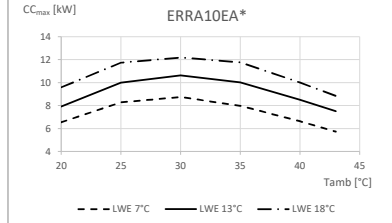
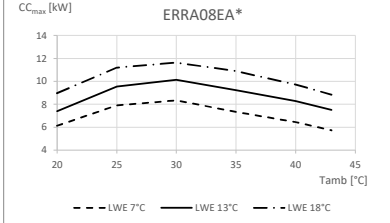
(4)The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value depending on the distance and acoustic environment. Refer to sound spectrum drawing for more information. Condition: Ta 35°C - LWE 7°C (DT =

3 Capacity graphs

3 - 1 Cooling Capacity Graphs

ERRA08-12EV3
ERRA08-12EW1

Maximum cooling capacity



Symbols

- CC_{max} Cooling capacity at maximum operating frequency, measured according to EN 14511.
- LWE Leaving water evaporator temperature [°C]
- Tamb Ambient temperature [°C DB]

Conditions

Cooling capacity

Capacity according to standard EN 14511 and valid for chilled water range ΔT = 3~8°C.

Notes

The capacity and power input is valid for -V3- models at -230-V and for -W1- models at -400-V.
The capacity and the power input are at maximum operation.

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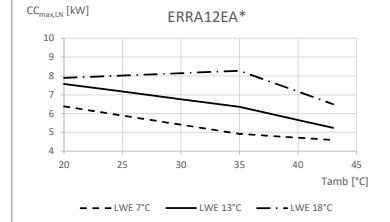
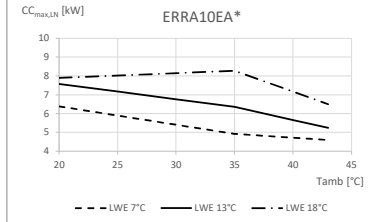
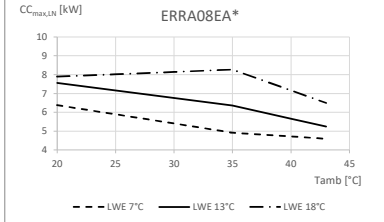
3 Capacity graphs

3 - 2 Cooling Capacity Graphs - quiet mode

ERRA08-12EV3
ERRA08-12EW1

3

Maximum cooling capacity



Symbols

CC_{max,LN} Cooling capacity at maximum operating frequency, measured according to EN 14511.
LWE Leaving water evaporator temperature [°C]
Tamb Ambient temperature [°C DB]

Conditions

Cooling capacity

Capacity according to standard EN 14511 and valid for chilled water range ΔT = 3~8°C.

Notes

The capacity and power input is valid for -V3- models at -230-V and for -W1- models at -400-V.
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)
Low noise level -1-

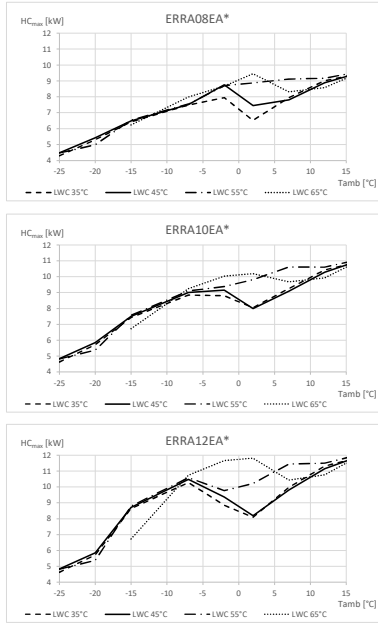
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3 Capacity graphs

3 - 3 Heating Capacity Graphs

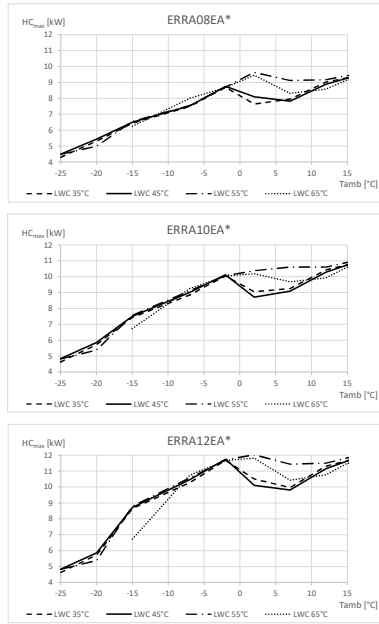
ERRA08-12EV3
ERRA08-12EW1

Maximum heating capacity - integrated value



Symbols
 HC_{max} Heating capacity for maximum load, measured according to EN 14511
 LWC Leaving water condenser temperature [°C]
 T_{amb} Ambient temperature [°C DB]

Maximum heating capacity - peak values



Conditions
Heating capacity
 Capacity according to standard EN 14511 and valid for heated water range $\Delta T = 3^{\circ}\text{C}-8^{\circ}\text{C}$.
Notes
 The capacity and power input is valid for -V3- models at 230-V and for for -W1- models at 400-V.
 The capacity and the power input are at maximum operation.

3D146962

3 Capacity graphs

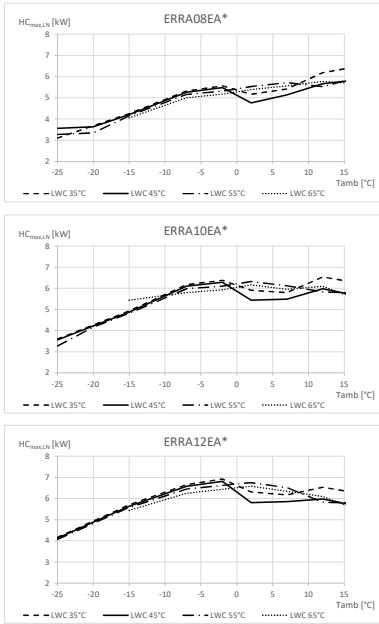
3 - 4 Heating Capacity Graphs - quiet mode

3

ERRA08-12EV3

ERRA08-12EW1

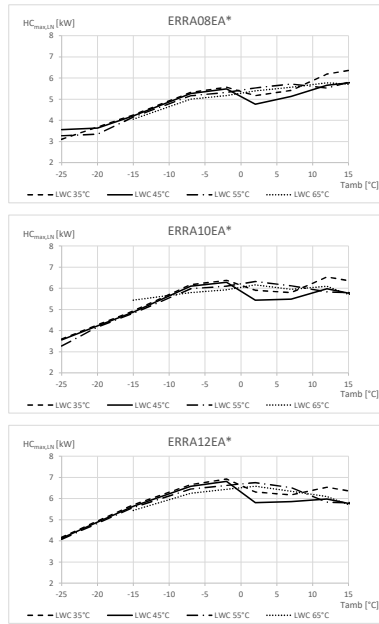
Maximum heating capacity - integrated value



Symbols

$HC_{max,IN}$ Heating capacity for maximum load, measured according to EN 14511
 LWC Leaving water condenser temperature [°C]
 T_{amb} Ambient temperature [°C DB]

Maximum heating capacity - peak values



Conditions

Heating capacity

Capacity according to standard EN 14511 and valid for heated water range $\Delta T = 3-8^{\circ}C$.

Notes

The capacity and power input is valid for -V3- models at -230-V and for -W1- models at -400-V.
 Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)
 Low noise level-1

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4 Capacity tables

4 - 1 Certification Programs

ERRA08-12EV3 ERRA08-12EW1

Rated data for certification programmes - heating mode

Tamb [°C]	EWC	LWC	ERRA08EAV3		ERRA10EAV3		ERRA12EAV3		ERRA08EAW1		ERRA10EAW1		ERRA12EAW1		Used for:
			HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	
7/6	30	35	6,17	4,92	6,17	4,92	6,17	4,92	6,17	5,10	6,17	5,10	6,17	5,10	Keymark, EHPA EHPA General General MCS Keymark, EHPA GET
2/1	(30)	35	5,74	4,08	5,74	4,08	5,74	4,08	5,74	4,23	5,74	4,23	5,74	4,23	
-7/-8	(30)	35	7,49	3,04	7,49	3,04	7,49	3,04	7,49	3,14	7,49	3,14	7,49	3,14	
7/6	40	45	7,73	3,57	7,73	3,57	7,73	3,57	7,73	3,70	7,73	3,70	7,73	3,70	
-2/-3	(40)	45	8,58	2,83	8,66	2,59	9,36	2,54	8,58	2,91	8,66	2,69	9,36	2,64	
7/6	47	55	7,72	2,94	7,72	2,94	7,72	2,94	7,72	3,05	7,72	3,05	7,72	3,05	
-7/-8	47	55	7,55	2,05	9,02	2,11	9,02	2,11	7,55	2,13	9,02	2,19	9,02	2,19	

Rated data for certification programmes - cooling mode

Nominal cooling capacity

Tamb [°C]	EWE	LWE	ERRA08EAV3		ERRA10EAV3		ERRA12EAV3		ERRA08EAW1		ERRA10EAW1		ERRA12EAW1		Used for:
			CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	
35	23	18	6,47	5,56	6,47	5,56	6,47	5,56	6,47	5,75	6,47	5,75	6,47	5,75	General DAPT General
35	12	7	6,81	3,17	7,97	3,00	8,62	2,91	6,81	3,28	7,97	3,10	8,62	3,01	

Seasonal data - cooling

LWE 7°C Low temperature Application

	ERRA08EAV3	ERRA10EAV3	ERRA12EAV3	ERRA08EAW1	ERRA10EAW1	ERRA12EAW1
Pdes [kW]	6,5	7,5	8,5	6,5	7,5	8,5
SEER [-]	5,38	5,34	5,31	5,42	5,41	5,41
ηs,c [%]	212	211	209	214	214	213
QCE [kWh/annum]	725	843	961	719	831	943

Rated data for certification programmes - domestic hot water performance

Indoor unit	ELV*12S18E1*		ELV*12S23E1*		ELS(X/H)(B/-)12P30EF		ELS(X/H)(B/-)12P50EF		Used for:
	ERRA*EAV3	ERRA*EAW1	ERRA*EAV3	ERRA*EAW1	ERRA*EAV3	ERRA*EAW1	ERRA*EAV3	ERRA*EAW1	
Application	Average climate		Average climate		Average climate		Average climate		Keymark
Domestic hot water tank volume [l]	180		230		294		477		
Tapping pattern	L		L		L		XL		
Heat-up time (hh:mm:ss)	01:57:00		02:14:00		02:29:00		03:28:00		
θ _{wh} [°C]	52,5		52,5		46,1		44,7		
P _{es} [W]	51,7	50,7	44,8	43,9	38,1	37,4	32,7	32,5	
V _{eq40} [l]	240		298		172,6		260,0		
η _{wh} [%]	116,7	120,3	126,4	130	115,7	119,3	131,5	135,7	
COP _{DomW} [l]	2,72	2,8	2,96	3,05	2,75	2,83	3,19	3,29	

Symbols

- HC Heating capacity measured according to EN 14511
- CC Cooling capacity, measured according to EN 14511.
- COP/EER Coefficient of Performance/Energy efficiency ratio according to EN 14511.
- EWC Entering water condenser temperature [°C]
- LWC Leaving water condenser temperature [°C]
- EWE Entering water evaporator temperature [°C]

- LWE Leaving water evaporator temperature [°C]
- Tamb Ambient temperature [°C DB/WB]
- θ_{wh} Reference Domestic hot water temperature [°C]
- P_{es} Standby power input
- V_{eq40} Equivalent domestic hot water volume [l]
- η_{wh} Efficiency [%]
- COP_{DomW} Domestic hot water heating mode

According to EN16147.
According to EN16147.
According to EN16147.

Rated data for certification programmes - heating mode

Measured according to UNI/TS 11300

Condition	Tamb [°C]	LWC [°C]	PLR [%]	ERRA08EAV3		ERRA10EAV3		ERRA12EAV3		ERRA08EAW1		ERRA10EAW1		ERRA12EAW1	
				HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP	HC [kW]	COP
A	-7/-8	34	100	7,49	3,10	8,73	3,02	10,22	2,93	7,49	3,20	8,73	3,12	10,22	3,03
B	2/1	30	100	6,68	3,87	7,83	3,86	8,41	3,86	6,68	4,01	7,83	3,99	8,41	3,98
C	7/6	27	100	8,44	5,60	9,84	5,42	10,61	5,32	8,44	5,78	9,84	5,59	10,61	5,48
D	12/11	24	100	9,27	7,52	10,70	7,35	11,59	7,24	9,27	7,77	10,70	7,58	11,59	7,46
A	-7/-8	52	100	7,54	2,20	8,91	2,21	10,55	2,22	7,54	2,28	8,91	2,29	10,55	2,30
B	2/1	42	100	7,81	3,47	8,04	3,21	8,16	3,08	7,81	3,58	8,04	3,31	8,16	3,18
C	7/6	36	100	8,16	4,43	9,54	4,42	10,31	4,41	8,16	4,57	9,54	4,56	10,31	4,55
D	12/11	30	100	9,04	6,16	10,49	6,21	11,39	6,24	9,04	6,35	10,49	6,40	11,39	6,43

Rated data for certification programmes - cooling mode

Measured according to UNI/TS 11300

Condition	Tamb [°C]	LWE [°C]	PLR [%]	ERRA08EAV3		ERRA10EAV3		ERRA12EAV3		ERRA08EAW1		ERRA10EAW1		ERRA12EAW1	
				CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER	CC [kW]	EER
A	35	18	100	10,89	4,35	11,77	4,11	12,66	3,87	10,89	4,51	11,77	4,26	12,66	4,01
B	30	18	75	7,96	6,05	8,73	5,98	9,51	5,90	7,96	6,26	8,73	6,19	9,51	6,11
C	25	18	50	5,51	8,83	5,90	8,36	6,28	7,88	5,51	9,04	5,90	8,60	6,28	8,17
D	20	18	25	3,47	12,42	3,47	12,42	3,47	12,42	3,47	12,29	3,47	12,29	3,47	12,29
A	35	7	100	7,33	3,09	7,97	3,00	8,62	2,91	7,33	3,20	7,97	3,10	8,62	3,01
B	30	7	75	5,34	4,06	5,86	4,01	6,38	3,96	5,34	4,20	5,86	4,15	6,38	4,10
C	25	7	50	3,66	5,21	3,95	5,22	4,24	5,23	3,66	5,36	3,95	5,39	4,24	5,42
D	20	7	25	2,19	6,20	2,19	6,20	2,19	6,20	2,19	6,17	2,19	6,17	2,19	6,17

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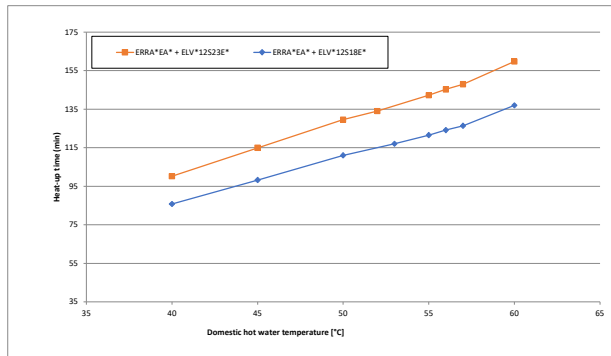
4 Capacity tables

4 - 2 Domestic Hot Water performance

4

ERRA08-12EV3
ERRA08-12EW1

Heat-up times



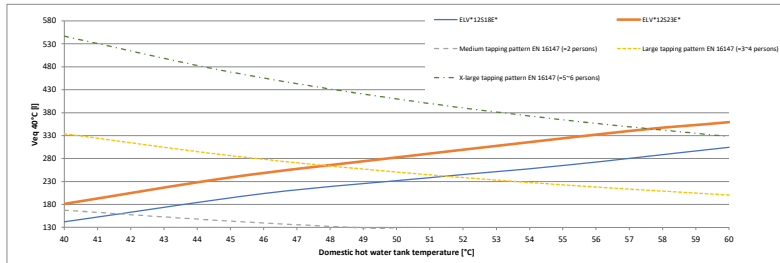
Notes

1. Time the indoor unit (heat pump only operation) requires to heat up the domestic hot water tank from 10°C to the indicated temperature. See the operation range for maximum domestic hot water tank temperature during heat pump only operation.

Model name	Heat-up time domestic hot water tank until
ERRA08/10/12/EA* + ELV*12S18E*	~98 min.
ERRA08/10/12/EA* + ELV*12S23E*	~115 min.

Selection guide for the domestic hot water tank volume

Ve_q 40°C = the amount of water with a temperature of 40°C that can be tapped when the domestic hot water tank is heated to a certain temperature, and the temperature of the cold inlet water is 10°C.

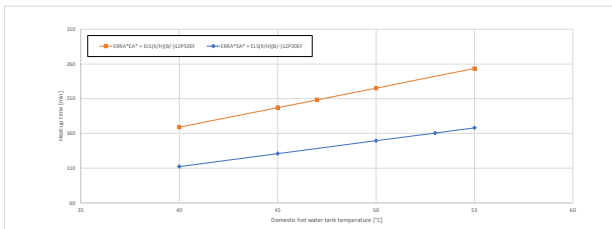


If a higher daily Ve_q 40°C is required, then additional heat-up cycles are required within 24 hours. See the operation manual for more information.

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ERRA08-12EV3
ERRA08-12EW1

Heat-up times



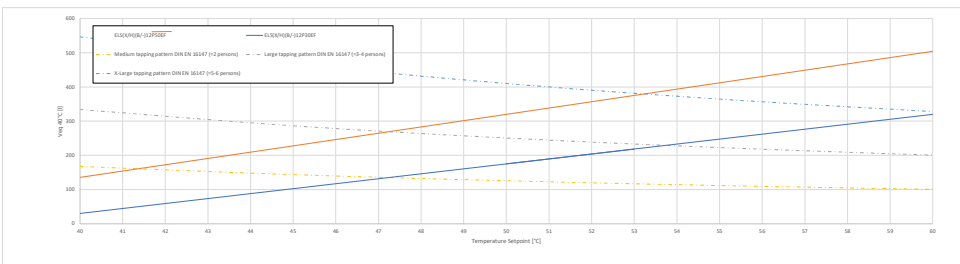
Model name	Heat-up time domestic hot water tank until 45°C
ERRA*EA* + ELSA*/HEB*/12SP2SE*	~124 min.
ERRA*EA* + ELSA*/HEB*/12SP1SE*	~107 min.

Notes

1. Time the indoor unit (heat pump only operation) requires to heat up the domestic hot water tank from 10°C to the indicated temperature. See the operation range for maximum domestic hot water tank temperature during heat pump only operation.

Selection guide for the domestic hot water tank volume

Ve_q 40°C = the amount of water with a temperature of 40°C that can be tapped when the domestic hot water tank is heated to a certain temperature, and the temperature of the cold inlet water is 10°C.

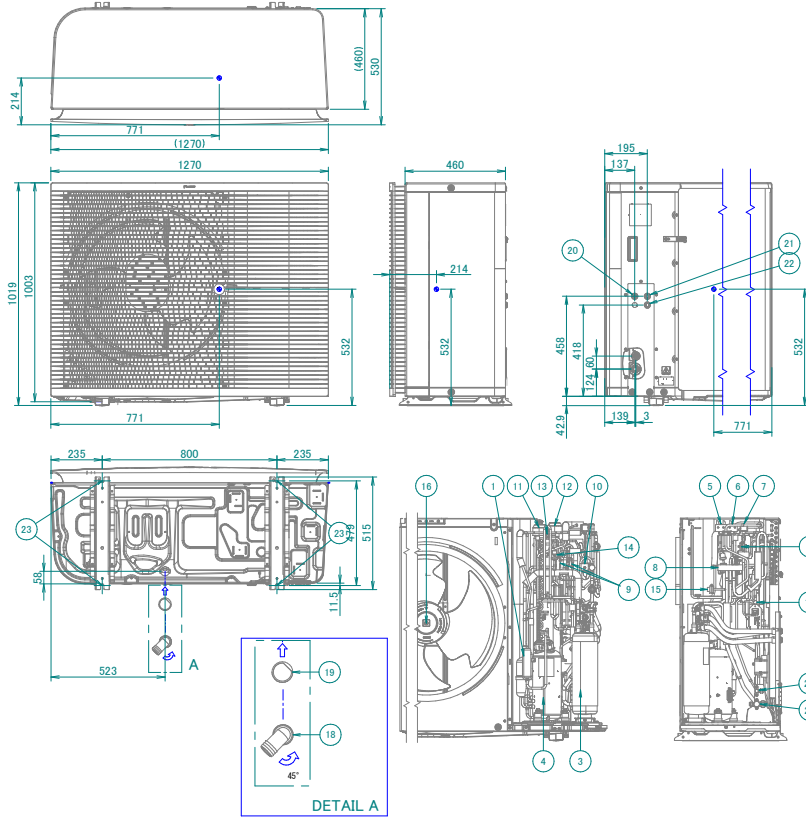


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5 Dimensional drawings

5 - 1 Dimensional Drawings

ERRA08-12EV3 / ERRA08-12EW1



- 1 Muffler
- 2 High pressure switch ·41.7 bar·
- 3 Accumulator
- 4 Compressor
- 5 Solenoid valve (low pressure bypass)
- 6 Solenoid valve (hot gas pass)
- 7 Solenoid valve (liquid)
- 8 4-way valve
- 9 Capillary tube
- 10 4-way valve
- 11 Electronic expansion valve (main)
- 12 Electronic expansion valve (injection)
- 13 High pressure switch ·46 bar·
- 14 Low pressure switch
- 15 Pressure sensor
- 16 Fan
- 17 Service port ·5/16"· flare
- 18 Drain elbow (included accessory)
- 19 Sealing (included accessory)
- 20 Drain tube heater cable intake
- 21 Interconnection cable intake
- 22 Power supply cable intake
- 23 4 holes for anchor bolts M12
- 24 Liquid stop valve ·1/4"·
- 25 Gas stop valve ·5/8"·

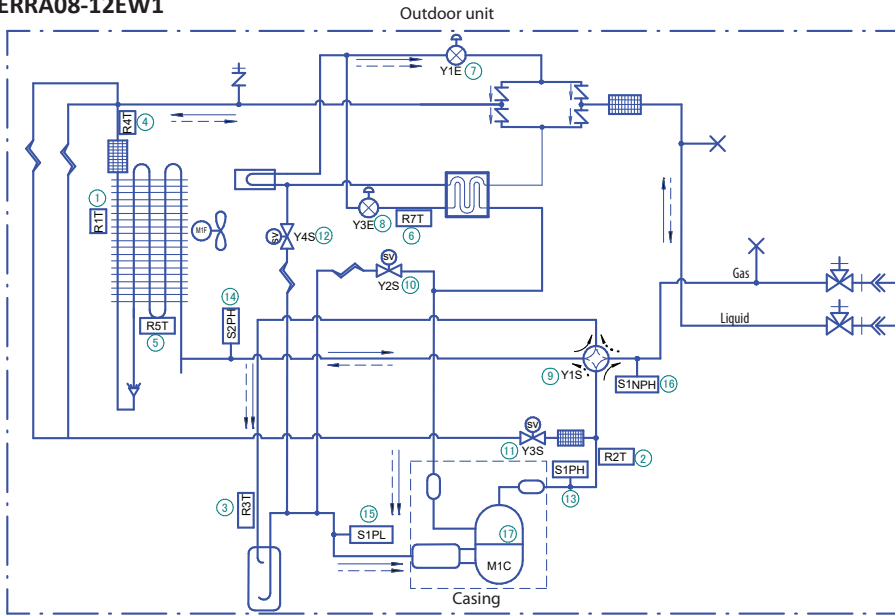
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6 Piping diagrams

6 - 1 Piping Diagrams

6

ERRA08-12EV3
ERRA08-12EW1



LEGEND

- PCB
- Electronic expansion valve
- Check valve
- Filter
- Economiser
- Solenoid valve
- Fan motor
- Stop valve
- Accumulator
- Pinched pipe
- Compressor
- Service port ·5/16"· flare
- Pressure sensor
- Muffler
- High pressure switch
- High pressure switch
- Capillary tube
- 4-way valve
- Heating
- Cooling

①	R1T	Ambient thermistor
②	R2T	Thermistor (discharge)
③	R3T	Thermistor (suction)
④	R4T	Thermistor (heat exchanger, liquid pipe)
⑤	R5T	Thermistor (heat exchanger middle)
⑥	R7T	Thermistor (injection)
⑦	Y1E	Electronic expansion valve (main)
⑧	Y3E	Electronic expansion valve (injection)
⑨	Y1S	Solenoid valve (4-way valve)
⑩	Y2S	Solenoid valve (low pressure bypass)

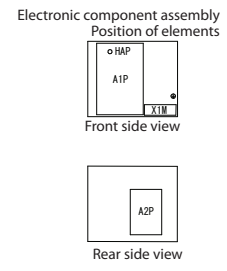
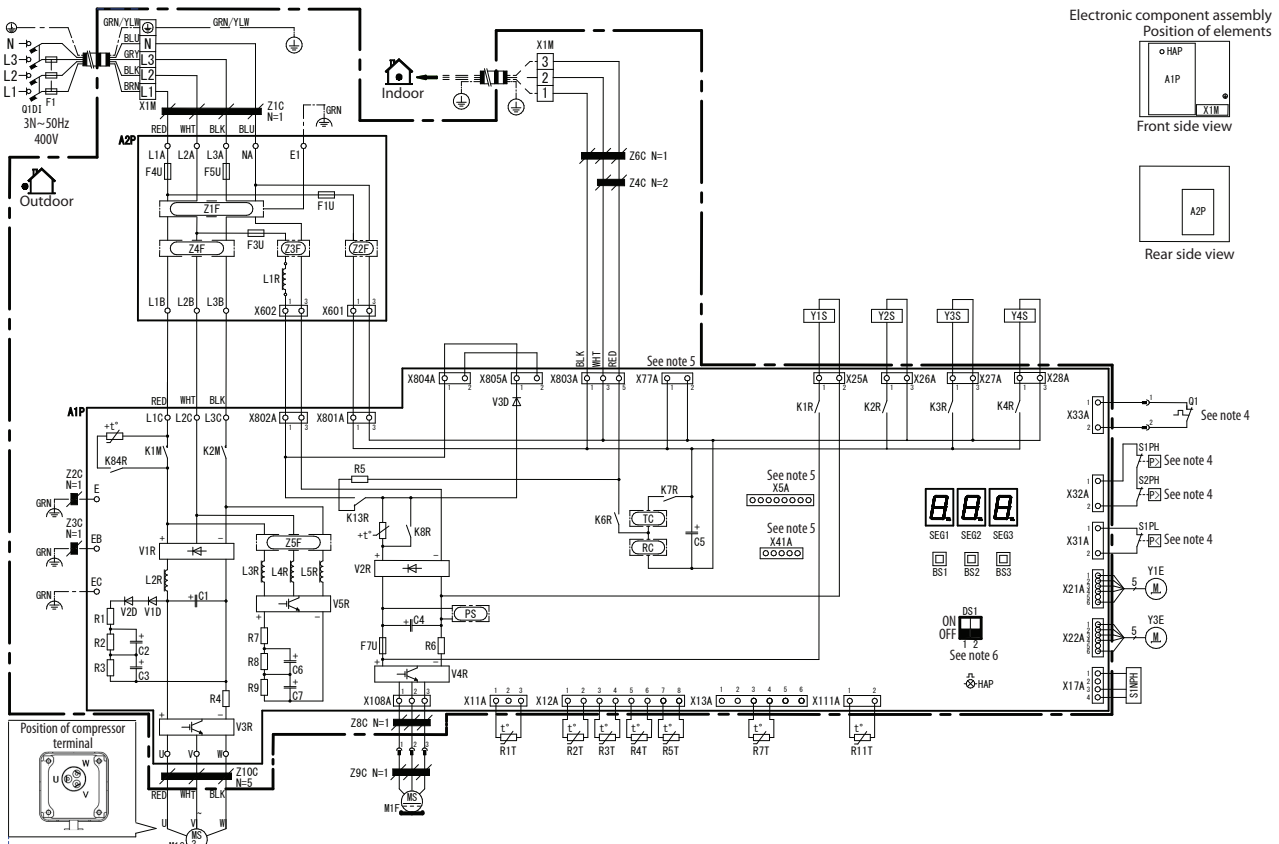
⑪	Y3S	Solenoid valve (hot gas pass)
⑫	Y4S	Solenoid valve (liquid injection)
⑬	S1PH	High pressure switch -4.6MPa-
⑭	S2PH	High pressure switch -4.17MPa
⑮	S1PL	Low pressure switch
⑯	S1NPH	High pressure sensor
⑰	Q1E	Overload protector
		● Brazed connection
		⇒ Flare connection

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7 Wiring diagrams

7 - 1 Wiring Diagrams - Three Phase

ERRA08-12EW1



A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
BS1~BS3 (A1P)	Push-button switch
C1 ~ C7 (A1P)	Capacitor
DS1 (A1P)	DIP switch
F1	Field fuse (supply supply)
F1U, F3U (A2P)	Fuse (T 6.3A / 250V)
F4U, F5U (A2P)	Fuse (30 / 500V)
F7U (A1P)	Fuse (T 5.0A / 250V)
HAP (A1P)	Light-emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K3R (A1P)	Magnetic relay (Y3S)
K4R (A1P)	Magnetic relay (Y4S)
K6R ~ K84R (A1P)	Magnetic relay
K1M ~ K2M (A1P)	Magnetic contactor
K13R~K15R (A1P, A2P)	Magnetic relay
L1R ~ L5R (A1P, A2P)	Reactor
M1C	Motor (compressor)
M1F	Motor (fan)
PS (A1P)	Switching power supply
Q1DI	Earth leakage circuit breaker (30mA) (field supply)
Q1	Thermal overcurrent protector
R1 ~ R9 (A1P)	Resistor
R1T	Thermistor (ambient)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger liquid pipe)
R5T	Thermistor (heat exchanger middle)
R7T	Thermistor (injection)
R11T	Thermistor (fin)
RC (A2P)	Signal receiver circuit
S1NPH	High pressure sensor
S1PH~S2PH	High pressure switch
S1PL	Low pressure switch
SEG* (A1P)	7-segment display
TC (A1P)	Signal transmission circuit
V1D~V3D (A1P)	Diode
V1R ~ V2R (A1P)	Diode module
V3R ~ V5R (A1P)	IGBT power module
X1M	Terminal strip

Y1E	Electronic expansion valve (main - black)
Y3E	Electronic expansion valve (injection - blue)
Y1S	Solenoid valve (4-way valve)
Y2S	Solenoid valve (low pressure bypass)
Y3S	Solenoid valve (hot gas bypass)
Y4S	Solenoid valve (liquid injection)
Z1C~Z10C	Noise filter (ferrite core)
Z1F~Z5F (A1P, A2P)	Noise filter

NOTES

- L : Live
N : Neutral
⊕ : Protective earth
⚡ : Noiseless earth
⏏ : Field wiring
⏏ : Option
□ : Terminal strip
⊠ : Connector
● : Connection
- Colours: BLK: black, RED: red, BLU: bleu, WHT: white, GRN: green, YLW: yellow, PNK: pink, ORG: orange, GRY: grey, BRN: brown
- This wiring diagram applies only to the outdoor unit.
- When operating, do not short-circuit protection device Q1, S1PH, S2PH and S1PL.
- Refer to the combination table and the option manual for how to connect the wiring to X5A, X77A, X41A.
- The factory setting of DIP switch DS1.1 is OFF.

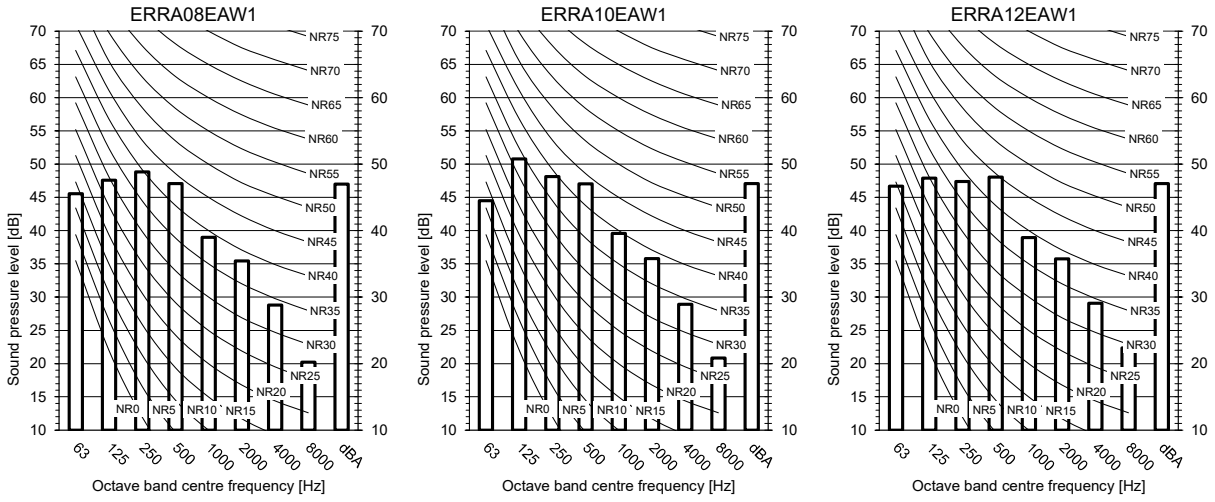
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8 Sound data

8 - 1 Sound Pressure Spectrum - Cooling

8

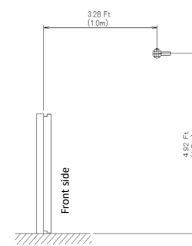
ERRA08-12EW1



Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μPa
- If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

Measuring location (discharge side)

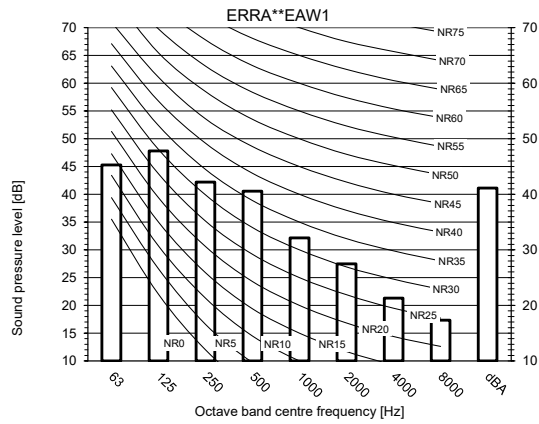
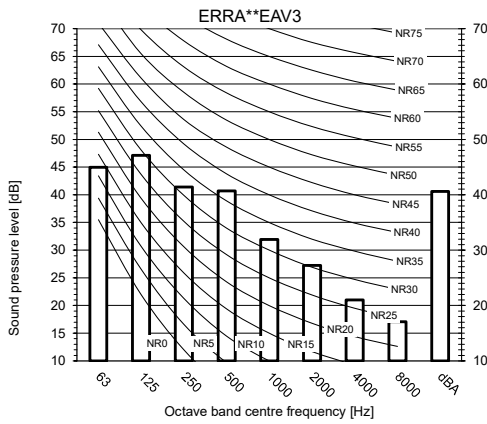


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8 Sound data

8 - 2 Sound Pressure Spectrum - Heating

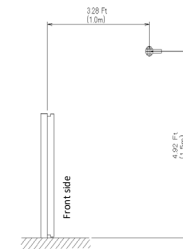
ERRA08-12EV3
ERRA08-12EW1



Maximum sound day	Maximum sound night	Maximum sound day Sound Power Level [dBA]			Maximum sound night Sound Power Level [dBA]		
		ERRA08EA*	ERRA10EA*	ERRA12EA*	ERRA08EA*	ERRA10EA*	ERRA12EA*
Default	Low noise level -1-	62	62	62	58,5	58,5	58,5
Low noise level -2-	Low noise level -3-	53	53	53	49,8	49,8	49,8

Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

Measuring location
(discharge side)



Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Conditions: Ta DB/WB -7/-6°C - LWC -35°C
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa
- * If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

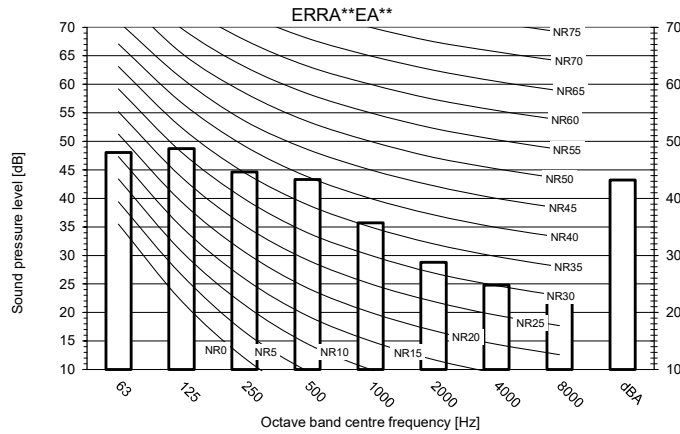
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8 Sound data

8 - 3 Sound Pressure Spectrum Quiet Mode

8

ERRA08-12EV3
ERRA08-12EW1

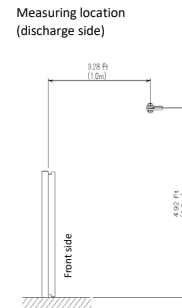


Maximum sound day	Maximum sound night	Maximum sound day			Maximum sound night		
		Sound Power Level [dBA]			Sound Power Level [dBA]		
Default	Low noise level ·1·	ERRA08EA*	ERRA10EA*	ERRA12EA*	ERRA08EA*	ERRA10EA*	ERRA12EA*
		62	62	62	58,5	58,5	58,5
Low noise level ·2·	Low noise level ·3·	53	53	53	49,8	49,8	49,8

Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

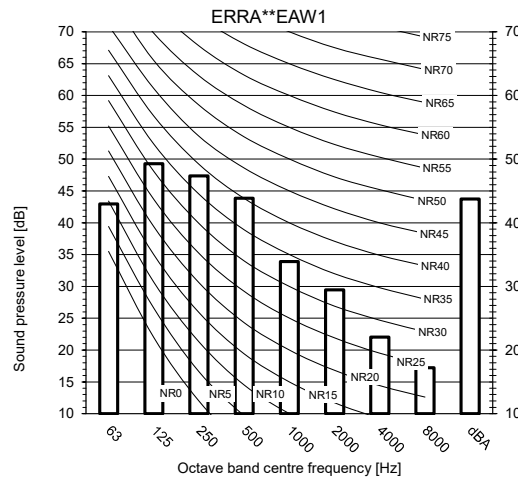
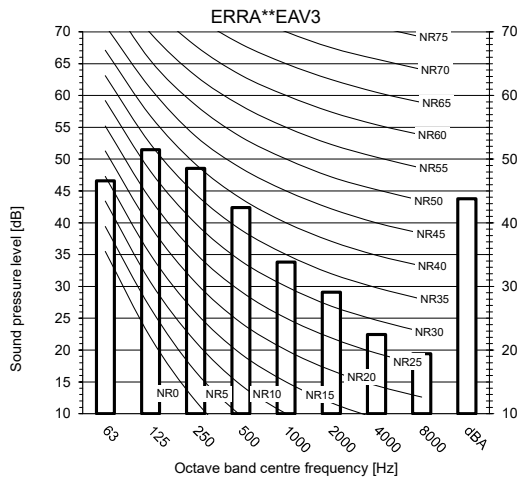
Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Conditions: Ta DB/WB -7/-6°C - LWC -55°C
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa
- If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



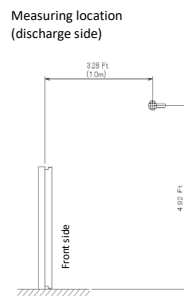
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ERRA08-12EV3
ERRA08-12EW1



Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa
- If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



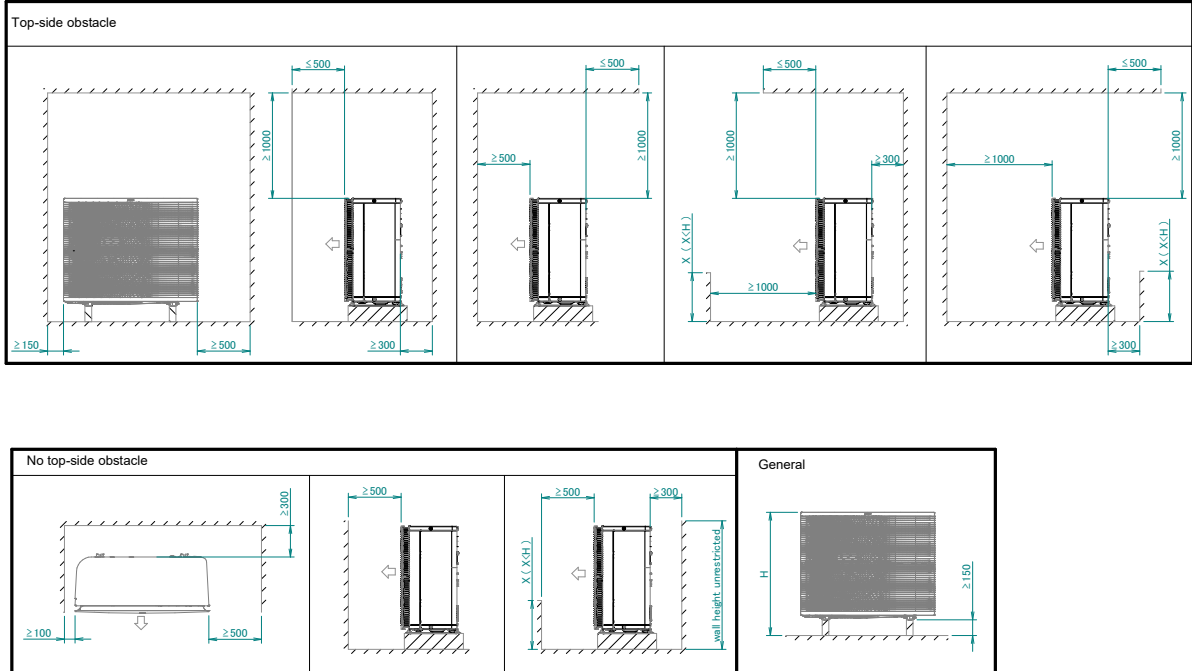
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9 Installation

9 - 1 Installation Method

ERRA08-12EV3
ERRA08-12EW1

Minimum space for air passage



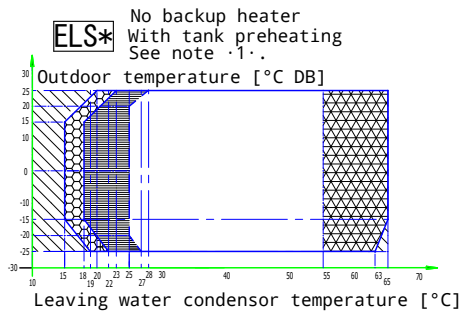
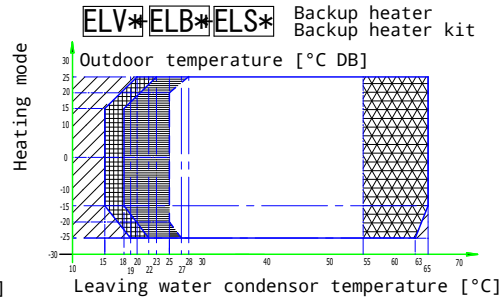
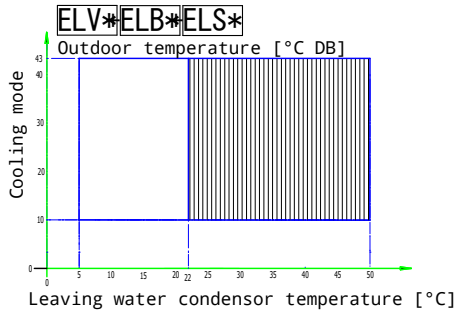
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10 Operation range

10 - 1 Operation Range

10

ERRA08-12EV3
ERRA08-12EW1



Legend

- Backup heater only operation
- No outdoor unit operation
- Heat pump + backup heater operation
- Pull-up area
- Auxiliary boiler only operation
- No outdoor unit operation
- Heat pump + auxiliary boiler operation
- Pull-up area
- Outdoor unit operation if controller setpoint is regulated to minimal leaving water temperature request.

See dashed lines

Outdoor unit operation if setpoint > 55°C and ΔT = 10°C (ΔT = outlet temperature - inlet temperature)

Pull-down area

Notes

1. Tank preheating
For details, see the installer reference guide.
2. In restricted power supply mode, the outdoor unit and backup heater can only operate separately.

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ERRA08-12EV3
ERRA08-12EW1

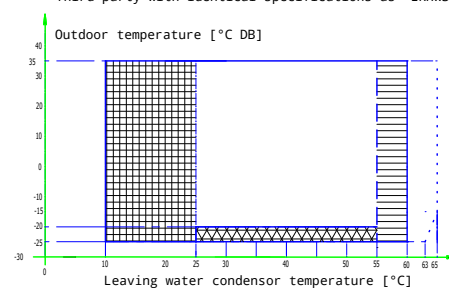
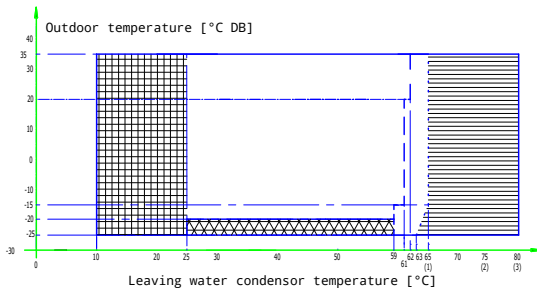
Domestic hot water heating mode

ELV* + ELS* + EKHWP* +
EKHWS*200*
EKHWS*250*
EKHWS*300*

+
Third-party with identical specifications as ·EKHWS*200*·

EKHWS*150*
EKHWS*180*

+
Third-party with identical specifications as ·EKHWS*150*·



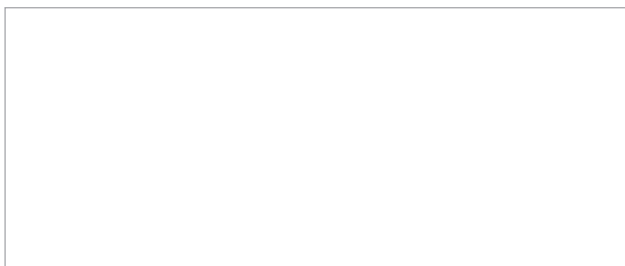
Legend

- Setpoint [°C]
- Domestic hot water
- Leaving water temperature [°C]
- Pull-up area
- Booster heater only operation (if a booster heater is part of the system)
 - (1) ·ELV*12*· indoor units only
 - (2) Combination of ·EKHWS*· and ·ELB*· indoor units / ·ELS*12*· indoor units only
 - (3) Combination of ·EKHWP*· and ·ELB*· indoor units
- Operation of the outdoor unit is possible. If the outdoor temperature drops below -20°C, unit will continue operation. But when the unit is OFF and the outdoor temperature is below -20°C, the outdoor unit will not start up. The indoor unit and backup heater will start in these cases.

Notes

1. In restricted power supply mode (·EKHW* only), the outdoor unit, booster heater and backup heater can only operate separately.
2. Third-party with identical specifications as ·EKHWS*150*·
Coil surface > 1.05·m² and < 3.7·m²
Tank thermistor and booster heater above heat pump coil.
3. Third-party with identical specifications as ·EKHWS*200*·
Coil surface > 1.8·m² and < 3.7·m²
Tank thermistor and booster heater above heat pump coil.

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08/2023



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